VOLUME 1 DRAFT ENVIRONMENTAL IMPACT REPORT SCH 2-022396-1

Lead Agency: Long Beach City Planning Commission

PROPOSED SELF STORAGE WITH RV STORAGE 712 W. Baker Street Long Beach, California

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SECTION 1

EXECUTIVE SUMMARY

Environmental Impact Report. This summary serves as a tool for the review of the subject matter and issues discussed in synopsis form. It should be noted that The following section contains a brief summary of the contents of the complete a review of the executive summary cannot replace a thorough and detailed examination of the documents.

Project History and Components

Oil Operators Inc. owns the subject property and has operated onsite water treatment facilities since 1926 to treat produced water (production brines) and other fluids recovered during oil production. The aforementioned process removed oil and sediment from the water, allowing the treated water to be disposed of offsite. As a by-product of this process, low-grade oil was recovered for recycling.

From 1926 to the mid 1950s, oil production brine was piped into various clay-lined basins, where the water underwent separation and skimming processes to remove oil and sediment prior to disposal of the water. In the mid 1950s, a water treatment plant was constructed onsite consisting of five circular concrete skimming basins and associated pumps, tanks, pipelines and other facilities. The treatment plant was located north of the two large rectangular basins referred to as Basins 1 and 2. Basin 1, is a large square settling basin containing an estimated 5,000 cubic yards of residual oily solids that settled out of the oil production brine water processed through the site over the last several decades. Basin 2 received relatively clean water after it had gone through various stages of skimming. In Basin 2 the water was held until it was released to the sanitation district for disposal. Additional smaller basins were historically present south of Basins 1 and 2. These smaller basins were closed in 1986 and 1987.

Oil Operator's members began to utilize two new water treatment facilities located in Signal Hill. Immediately prior to ceasing operation at the subject site in 1998, the Oil Operators facility consisted of the five circular concrete skimming basins, Basins 1 and 2, various aboveground storage tanks and surface buildings. Much of the vacant area of the property was formerly leased to a plant nursery.

The property has been undergoing decommissioning in phases since 1998. The proposed project is to reuse the site for self-storage with interim RV parking and storage. Before any project can be built on the property, the entire site must be remediated to standards set by the Regional Water Quality Control Board

(RWQCB) with subsequent environmental clean-up permits issued by the RWQCB and the Long Beach Health and Human Services Department.

Summary of Project Impacts

The Environmental Impact Report identifies and analyzes a number of potential environmental impacts that may be generated by the site preparation, and development and operation of the self-storage and RV parking facility. These impacts are summarized below.

I. AESTHETICS

Existing Setting

The small lot single-family homes on the east side of Golden Avenue are currently visually impacted by the conditions of the site. The site is fenced and partially screened. From a visual standpoint, the site is abandoned and is not maintained.

Anticipated Impacts

The DEIR should evaluate the visibility and interface of the proposal to the nearby residential properties. The proposal includes a landscape buffer on the east side of the project site. This buffer consists of a meandering walkway, sitting areas, landscaping and a split face block wall. The draft EIR should analyze the proposed buffer for effectiveness as well as mitigation measures to increase the effectiveness of the buffer.

II. AGRICULTURAL RESOURCES

The project site is not located within an agricultural zone and there are no such zones within the vicinity of the project. There are no agricultural resources, which will be impacted by this project. This resource will not be evaluated in the EIR.

III. AIR QUALITY

Existing Setting

The South Coast Air Basin is subject to possibly some of the worst air pollution in the country, attributable mainly to the topography, climate, meteorological conditions, a large population base and highly dispersed urban land use patterns.

Air Quality conditions are primarily affected by the rate and location of pollutant emissions and by climatic conditions that influence the

movement and dispersion of pollutants. Atmospheric conditions such as wind speed, direction and temperature gradients along with local and regional topography provide the links between air pollutant emissions and air quality.

The South Coast Air Basin generally has a limited capability to disperse air contaminants because of its low wind speeds and persistent temperature inversions. In the Long Beach area, predominate daily winds consists of morning on-shore air flow from the southwest at a mean speed of 7.3 miles per hour and afternoon and evening off-shore air flow from the northwest at 2.0 to 4.7 miles per hour with little variability between sessions. Summer wind speeds average slightly higher than winter wind speeds.

One of the main meteorological conditions that influences air quality in the Los Angeles Basin is the persistent inversion layer. Cooler air from the ocean underlies air which has been warmed by surface contact giving rise to persistent capping inversion which occurs on almost every day of the year, reaching heights above ground of approximately 1,200 feet on some summer afternoons and not infrequently remaining ground based during the coldest months of the year.

The majority of the pollutants normally found in the Los Angeles County atmosphere originate from automobile exhaust as hydrocarbons, carbon monoxide, oxides of nitrogen and other materials including PM₁₀. Of the five major pollutant types (carbon monoxide, nitrogen oxides, reactive organic gasses, sulfur oxides and particulates), only sulfur oxide emissions are dominated by sources other than automobile exhaust. The recently released MATES II study suggests that the general area of the project is strongly influenced by truck traffic particularly from the I-710 Freeway. The site is also influenced by the I-405 Freeway. The site continues to exhibit strong odors from the past use and the basins.

IV. BIOLOGICAL

Existing Setting

The site currently contains the following vegetation stands:

Eucalyptus sp.
Cupressus Leylandii
Cupressus sp.
Bougainvillea sp.
Fraxinus sp.

Schinus terebinthifolia Schinus molle Nerium oleander Ficus sp. Cupaniopsis sp. Washingtonia robusta

In addition, the site contains grasses, forbs and herbaceous material which have migrated onto the site.

The above species are generally common ornamental plant material commonly available. The plants are the result of prior use (including the equestrian facilities); in some instances, the plants have migrated onto the site. Generally the plants, although mature, are in poor to bad condition due to lack of care, water and soil contamination. In the case of grasses, forbs and herbaceous material, there is no evidence of sensitive species such as the Southern Tar Plant on site.

Anticipated Impacts

The project will not have an adverse effect upon rare or sensitive plants, terrestrial species or avifauna. The proposal will result in the removal of all existing vegetation. Over the long term have a major beneficial impact in that the new landscaping will serve as habitat for urban wildlife.

V. CULTURAL

Existing Setting

The site is not listed. Further, there are no recorded resources within influence of this site.

Anticipated Impacts

Because the site has not been graded, the EIR will address the potential for discovering archeological artifacts.

VI. GEOLOGY AND SOILS

Existing Setting

The project area is north of the Newport-Inglewood fault zone. The site is subject to liquefaction and is contaminated.

Anticipated Impacts

The DEIR should evaluate the extent of contamination and the proposed method of remediation.

VII. HAZARDS AND HAZARDOUS MATERIALS

Existing Setting

The site is currently vacant and fenced. Past studies indicate that the site is contaminated and that remediation is necessary prior to construction.

Anticipated Impacts

The DEIR should include an evaluation of the remediation plan and submit same to the Regional Water Control Board and the California Department of Toxic Substance Control.

VIII. HYDROLOGY

Existing Setting

The site is not within a designated flood zone.

Anticipated Impacts

The DEIR should evaluate the proposed drainage plan during both site preparation (remediation and grading) and operation.

IX. LAND USE

Existing Setting

The General Plan designates the site for Single Family use while the zoning designates the site for Commercial Storage.

Anticipated Impacts

The DEIR should evaluate the proposal relative to the compatibility to both the General Plan and Zoning. In addition, the DEIR should investigate the compatibility of the proposal with the adjacent residential community.

X. MINERAL RESOURCES

This resource category is not applicable. The proposal will not result in a loss of an important mineral resource.

XI. NOISE

Existing Setting

The project area is heavily influenced by the adjacent and nearby freeways, particularly the elevated ramp to the I-405 Freeway. The existing ambient is approximately 65dBA.

Anticipated Impacts

Remediation, site preparation, and construction can be expected to generate high noise levels. The DEIR should evaluate impacts upon the adjacent community. The DEIR should also evaluate proposed operations.

XII. POPULATION AND HOUSING

The proposal will not have a direct effect upon population of housing.

XIII. PUBLIC SERVICE

Existing Setting

The North Division Police Station serves the project area.

The Fire Department will review the plans, prior to the release of the building permit.

Anticipated Impacts

The DEIR should determine what impact, if any, the proposal will have upon public services.

XIV. RECREATION

Existing Setting

The site is shown as "Open Land, Proposed Park" in the Los Angeles County Department of Public Works Master Plan for the Los Angeles River.

XV. TRANSPORTATION/TRAFFIC

Existing Setting

Wardlow Road is designated as a major arterial. The intersection of Wardlow Road and Magnolia Avenue, while signalized, is difficult due to the five intersections. This intersection is also heavily impacted by back up traffic from the Blue Line.

Anticipated Impacts

The proposal will have separate access from Wardlow Road. The DEIR should have a detailed traffic study of the new access as it interfaces with the Wardlow traffic.

XVI. NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM

Existing Setting

The site is contaminated and open. In some cases, the street and adjacent properties drain onto the site.

Anticipated Impacts

The DEIR should evaluate the impacts of the proposal on drainage and conformity with NPDES.

XVII. UTILITIES AND SERVICE SYSTEMS

Existing Setting

The existing utilities and service systems are currently in place.

Anticipated Impacts

No significant impacts are anticipated.

Summary of Impacts after Mitigation

Impact	Mitigation	Impact after Mitigation
Aesthetics		
Adverse construction		
Impacts	(Air Quality mitigation): screening	
- Impacts	And dust control	Less than significant
Night Illumination:	And dast control	Less than significant
Adverse impacts to		
Residential areas.	Limit location, height of standards,	
	Shield, utilize state of the art fixtures	
	To control spillover, construct solid	
	Walls adjacent to residential use,	
	Close park at dusk.	Less than significant
Beneficial Impacts:		,
Elimination of permitted		
Visually incompatible uses	None are required	Beneficial impacts
Air Quality		
Adverse grading and		
Soil importation impacts	Trucks hauling loose materials to	
	Be covered, soil stabilizers to be	
	Utilized, site to be watered down,	
	Transport trucks to be washed,	
	Particulate screen to enclose	
	Site, conform to Rule 403 of	
	SCAQMD	Reduced although
		Continuing Adverse
-		Impacts.
<u> </u>		
Minor/adverse impacts		
Due to methane gas	Venting to conform to SCAQMD/	
	LADHS.	Less than significant
Beneficial Impacts:		
Elimination of potential		
Impacts due to landfill.	None are required	Beneficial impacts
Riology		
Biology No imposts	None are required	No import
No impacts	None are required	No impact
Cultural Resources	Name and administration	No large est
No impacts	None are required	No impact
Geology and Soils		
No significant impacts		
The mitigation contained		
In the hydrology section		
Will prevent erosion.	None are required	No impact
•	1	,
Beneficial Impacts due to		

Installation of the landfill		
"cap"	None are required	Beneficial impacts
Hazards and Hazardous	Materials	
Beneficial impacts are		
Anticipated due to elimination		
Of potential methane buildup		
And achieving the partial		
Landfill closure	None are required	Beneficial Impacts
Landin Globare	None are required	Deficilitial impacts
Hydrology and Water Qu	ıality	
Adverse impacts due to		
Soil importation and grading		
Which can cause erosion.	Erosion protection plan required,	
	Compliance with NPDES,	
	Storm water interceptor required,	
	Conform to CA Code of Regs, Title 27.	Less than significant
Land Harrier Blanch		
Land Use and Planning		
Adverse Impact: project		
Does not conform to General		
Plan and zoning.	Applications to amend the	
-	General Plan and Zoning mitigate	
	Non conformity	Less than significant
Beneficial Impacts: Elimination		
Of permitted inappropriate		
Use for land fill and incompatib	le	
Use with adjacent properties.		Beneficial Impacts
, , ,	·	·
Mineral Resources		
No impacts are anticipated.	None are required.	No impact
National Pollution Disch	argo Elimination System	
	arge Elimination System	
Adverse impacts due to		
Potential to impact storm	5 0 11 11	
Water.	Prepare Storm Water Pollution	
	Prevention Plan for both	
	Construction and project	
-	Operations.	Less than significant/
-		Beneficial impacts as
		Compared with the
		Existing situation.
Noise		
Noise		
Adverse Impacts: soil		
Importation and grading		
Will significantly exceed		
Ambient noise levels.	Limit the hours of grading, prevent	
	Queuing of trucks, advise residents	
	In advance of operations, utilize	Reduced, although
	Quieter equipment.	Adverse impacts during
		Construction.

Operation of the		
Park may cause adverse	Class park at duals. The	
Impacts.	Close park at dusk. The	
	Intense hard courts such as the	
	Skateboard area and basketball	
-	Shall be located at least 100	
	Feet from the property line	
	Abutting residential use, league	
	Activities are prohibited, public	
	Address systems are prohibited,	
	Sound barrier walls shall be	
	Constructed along the southern	
	Property line and property lines	
	adjacent to active recreational use.	Less than significant
Population and Housing		
None are anticipated	None are required	No impacts.
Public Service		
Beneficial impacts due to		
Improvement of 55 th Way.	None are required	Beneficial impacts
Fire services		
Beneficial Impacts: new		
Fire suppression to be		
Installed; elimination of hazardo	nic	
Situations.	None are required	Beneficial impacts
Police services		
Adverse impacts due to		
Increased demand for		
Services.	The neighborhood park	
	Shall be fully walled/fenced,	
	All access points shall be fully	
	Gated, the park shall be	
	Closed at dusk, vehicular police access	
	Shall be from 55 th Way, Via Norte, the	
	Park shall be lighted to the standards of	
	The LBPD, the basketball "hoops"	
	Shall be removed at dusk, the surroundi	na.
	Slopes shall be planted with defensive	ייש
	Plants, all graffiti shall be removed from	
	The park and surroundings within 24 hou	ıre
	The park and surroundings within 24 hot	
		Reduced, although Adverse impacts
Public health		r
Beneficial impacts: elimination		
Of a standing water situation		
Which Currently generates		
insects.	Prohibit standing water	Beneficial impacts

Recreation
Beneficial impacts in
That a neighborhood park

Will be provided in a		
Dense area which does		
Not have any park		
Space and the facility		
Will serve as mitigation for		
Scherer Park.	Dedicate the land for park	
-	In perpetuity. Consider providing	
	Pedestrian access from Via Norte	
	Oriziba Ave.	Beneficial Impacts
Traffic and Transportat	ion	
Minor adverse impact	ion	
Soil importation will generate		
Significant truck trips.	Prepare a truck route plan for	
	Approval.	Less than significant
Potential adverse impacts	Approval.	Less than significant
To pedestrian safety	Provide pedestrian access from	
	Orizaba and Via Norte, the	
	Intersection of Paramount and	
	55 th Way shall be restriped.	Less than significant
Minor adverse impact due	,	Ü
To parking designed to		
Meet only average		
Attendance.	Provide parking on one side of	
	— 55 th Way.	Less than significant.
Utilities and Service Sy	stems	
No significant impacts		
Are anticipated.	Sewer connection fee is	
	Required	No impact

Summary of Impacts after Mitigation

Impact	Mitigation	Impact after Mitigation
Aesthetics Adverse construction		
Impacts	(Air Quality mitigation): screening And dust control	Less than significant
Interaction between self- storage use and adjacent residential uses	Based on the plan elevations see page 55 and Exhibit 6-1-3.2	Less than significant
Air Quality Adverse construction		
Impacts	Trucks hauling loose materials to Be covered, soil stabilizers to be Utilized, site to be watered down, Transport trucks to be washed, Particulate screen to enclose Site, conform to Rule 403 of	
	SCAQMD	Reduced although Continuing Adverse Impacts during
		construction
Biology		
No impacts	None are required	No impact
Cultural Resources		
No impacts	None are required	No impact
Geology and Soils No significant impacts The mitigation contained In the hydrology section		
Will prevent erosion.	See pages 88-90	Less than significant
Hazards and Hazardous Beneficial impacts are Anticipated due to	Materials	
Site remediation	Se page 99 & 100	Beneficial Impacts
Hydrology and Water Quadverse impacts due to Potential soil importation and grading which can cause	uality	
erosion.	Erosion protection plan required, Compliance with NPDES,	Beneficial Impacts

Land Use and Planning

Adverse Impact: project

Does not conform to General

Plan Applications to amend the

General Plan to mitigate

Non-conformity Less than significant

Mineral Resources

No impacts are anticipated. None are required. No impact

National Pollution Discharge Elimination System

Adverse impacts due to Potential to impact storm

Water. Prepare Storm Water Pollution

Prevention Plan for both Construction and project

Operations. Less than significant

Noise

Adverse Impacts:

Grading and construction Will significantly exceed

Ambient noise levels. Limit the hours of grading, prevent

Queuing of trucks, advise residents In advance of operations, utilize

Quieter equipment.

Reduced, although
Adverse impacts during

construction

Population and Housing

None are anticipated None are required No impacts.

Public Service

Fire Services see page 125 Less than significant

Police services Provide security and lighting Less than significant

Traffic and Transportation

Construction related traffic Wardlow Road access prior

To construction

Less than significant

Operational traffic Construct Wardlow Road access Less than significant

Utilities and Service Systems

Sewer line on property Obtain "build over" permit

From LA County sanitation district Less than significant

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PROJECT ALTERNATIVES SUMMARY

In accordance with the California Environmental Quality Act (CEQA) Article 9, Section 15126 (d) (5), the Environmental Impact Report identifies and analyzes a number of potential "reasonable" alternatives and selects an "environmentally superior alternative" (including the proposed project) that would generate the least environmental impacts that could be constructed on the project site and that could feasibly achieve similar objectives. These alternatives and their environmental impacts are summarized below.

It should be pointed out that a number of additional alternatives were considered and eliminated as not being feasible. The "Alternative Sites" alternative is among these alternatives found to not be feasible. Initially a vacant site was considered, however, it was not large enough to accommodate the proposed project. Further the site is privately held and is in the process of acquiring entitlements for residential housing. There is no other vacant land in the project vicinity, which is suitable for the proposed project. Because of the social and economic impacts of dislocation, acquisition and demolition of developed property was not considered to be viable or desirable. For these and other reasons, consideration of alternative sites was eliminated.

Alternative 1 - No Project Insert

Consideration of this alternative is mandated by the California Environmental Quality Act. Under this alternative, the project would not proceed. The site is currently vacant and it is not realistic to assume that the site would remain so for an indefinite period of time. Rather, it is likely that the land would be re-utilized for uses permitted by the Zoning Regulations and the General Plan Land Use Designation.

Summary of Environmental Impacts Alternative 1

Environmental Analysis

The No Project/No Development Alternative would not implement the City's General Plan designation for development on the project site. In leaving the site in its current undeveloped condition (a vacant lot formerly used for separation of oil products from water), all physical impacts associated with the proposed project would not be generated by the proposed site uses, the current views of the site would remain the same, and no topographic, hydrologic, or land use changes would occur. This alternative would not generate the need for additional public services and utility consumption as would the project.

At an early stage, alternative sites were considered. The principle considerations for alternative sites included the following criteria among others:

- To meet the demand within the area for neighborhood self-storage facilities
- To redevelop a presently blighted parcel of land with development constraints to an economically viable and more attractive use
- To convert a former incompatible industrial use to one that is more compatible with the adjacent neighborhood
- To create a development that will not pose a health hazard to the surrounding neighborhood
- To provide a transitional buffer between the residential neighborhood to the East, and the Long Beach Freeway (I-710), the Los Angeles River, and the San Diego Freeway (I-405) to the West and North.

Because the City of Long Beach is nearly built out, there are very few vacant sites of this size available. One of the sites that was considered as a possible alternative site is the Alamitos Ridge site. This site is bordered by Redondo Avenue, on the south, by 20th Street, on the west by Obispo Avenue, and on the north by a future school site. This site is currently vacant and is approximately 14 acres in size.

The Alamitos Ridge site was considered, however it is not large enough, being 14 acres, whereas the proposed site is approximately 20 acres. In addition, it is held as private property as is the proposed project site. Consequently, this alternative to the EIR was not considered to be reasonably feasible or desirable and was therefore not considered further.

The following alternatives are considered herein:

Alternative 1: No project/No Development

Alternative 2: Light Industrial Development

Alternative 3: Passive Park

Alternative 4: No project/Implementation of the Existing General Plan

Alternative 1 – No project/No Development

Consideration of this alternative is mandated under the California Environmental Quality Act.

This alternative would leave the project site in its present undeveloped condition (a partially vacant lot formerly used as for oil separation). This alternative supposes that no development or specific use of the property

would occur, regardless of zoning, General Plan designation, or other prior determinations made by the City. Under this alternative, the project would not proceed. As has been stated, the site is currently vacant. The current blighted conditions would continue, however Basin 1 would be remediated as ordered by the Long Beach Health Department.

Summary of Environmental Impacts Alternative 1

Environmental Analysis

The No Project/No Development Alternative would not implement the City's General Plan designation for development on the project site. In leaving the site in its current undeveloped condition (a partially vacant lot formerly used for separation of oil products from water), all physical impacts associated with the proposed project would not be generated by the proposed site uses, the current views of the site would remain the same, and no topographic, hydrologic, or land use changes would occur. This alternative would not generate the need for additional public services and utility consumption as would the project.

Conclusion

This alternative would not result in any physical environmental effects. Maintenance of the site in its existing vacant condition would reduce impacts to physical resources, including impacts to earth resources, and visual resources. In comparison to the proposed project, it would eliminate significant impacts to short-term air quality, in particular dust of PM_{10} emissions, associated with project construction. In addition, the interim construction noise would be eliminated.

However, this alternative would result in eliminating opportunities to provide commercial storage and RV parking, as the site is currently zoned. In addition, the parcel would remain undeveloped and contaminated for a longer period of time.

Regardless of the outcome of the proposed project application, the project site is likely to be developed in the future, as it is one of the few remaining vacant land parcels within the City. The General Plan and Zoning Code designate the site for development. The site is a potential infill site, with adequate infrastructure and community services for future development. Therefore, the No Project/No Development Alternative is realistically an interim use of the site, with some environmental effect to take place in the future.

Alternative 2- Industrial Development – Office Warehousing

Under this alternative, the site would be redeveloped to a light industrial use. Such a use would require a Rezoning from CS to IL and a General Plan amendment from LUD-1 to LUD 9R. The existing zoning "CS" only allows self-storage, which is the least impacting light industrial use allowed by LUD-9R, Light Industrial.

This alternative considers that the site develop as a typical light industrial use, which is warehousing with associated office. This type of use would have a greater impact to the surrounding community, as it generates more traffic, has a height limit of 60 feet, and would create more noise during operation.

Summary of Impacts Alternative 2

Aesthetics

The warehousing with associated office would result in a building bulk, mass and height, which are not compatible with the adjacent residential neighborhoods. Significant adverse impacts are anticipated.

Air Quality

Warehousing and office represents a significant increase in vehicular trips and truck trips to the site. Depending on where access to the site is taken, the air quality for the adjacent homes could adversely affected if access is taken from Baker Street. Adverse impacts are anticipated.

Hazards and Hazardous Conditions

In order for any construction project to take place at the site, the site must be remediated to at least the RWQCB standards. No change expected.

Land Use and Planning

Such a use will require both a General Plan Amendment and Rezoning. The use is generally considered to be a more intense than the proposed project and would not be as compatible with the adjacent neighborhoods. Significant impacts are anticipated.

Noise

This alternative will be active all day long and will have more employees at the site, making more vehicle trips. This use is typically more impacting that self-storage and is expected to have more significant impacts.

Population and Housing

Similar to the proposed project, this use will preclude housing on site.

Transportation

This alternative would generated more trips than the proposed use. In addition, the access may not occur from Baker Street, thus sending business use trips through the adjacent neighborhood. Significant impacts are anticipated.

Alternative 3- Passive Park

Many people are concerned about the use of the project site. Many suggestions at the scooping meeting were made regarding limiting the use of this site to a passive park.

If this were the case, the owner of the property would need to change the zoning and General Plan designations to park, losing development value of its privately held property. In addition, this use would not ensure that the site was completely remediated to RWQCB standards.

The proposed project will have a person on-site at all times and the facility will be continually monitored. A passive park will result in less surveillance of the site and because of the remote nature of the site, police services may be impacted.

Summary of Impacts Alternative 3

Aesthetics

This alternative could affect the amount of remediation required at the site and could remain in a blighted state for a longer period of time. It would not be visually screened from the adjacent neighborhood. Increase impacts could result.

Air Quality

This alternative would cause less air quality impacts during the construction phase and the operational phase, as fewer trips are likely to be generated by a passive park. Beneficial Impacts anticipated.

Hazardous and Hazardous Conditions

Site remediation would be necessary to the same standards as the proposed project. Impacts Neutral.

Hydrology and Water Quality

Because the site is currently vacant and slopes westward, a passive park would not alter the existing drainage pattern of the site. However, the site would likely create more surface runoff than the proposed project as the proposed project would be constructed to comply with NPDES. More significant impact expected.

Land Use

This alternative would require both a zone change and General Plan amendment. However, it would be compatible with the adjacent residential and the adjacent regional bikeway located on the LA River to the west of the site. Less impacts expected.

Noise:

This alternative would not provide a noise buffer from the I-710 and the I-405, to the adjacent neighborhood. However, construction noise from this alternative would be less that from the proposed project. From an operational standpoint, self-storage is known as a "quite-use", noise impacts would be more significant. Less impacts expected.

Population and Housing:

This alternative would preclude dwellings and population. With an average lot size of 6,000 square feet, approximately 138 homes could be built according to the General Plan designation currently on the site. Adverse impacts are anticipated to Long Beach Housing.

Public Services

This alternative could add to police services needed at the site, due to the remote nature of the site. Increase impacts expected, as the proposed project will incorporate crime prevention design techniques and lighting. In addition the site will be fenced with security devises installed.

Recreation

This alternative would create additional park space. The City's Open Space and Recreation Element's goal for the City is having 8 acres of Parkland for every 1000 residents. The west-side of Long Beach is considered deficient in parkland

according to this policy and would benefit from this alternative. Less impacts anticipated.

Transportation

While a passive park use would not generate as many trips as an active park use, it would generate some. These trips would be added to the roadway of the adjacent neighborhoods. Some additional impacts expected.

Alternative 4- No Project/General Plan Designation

The General Plan designation on the subject site is LUD - 1, allowing the development of single-family dwellings. Overall it would accomplish most of the goals of the proposed project, site remediation and revenue to the property owner. However, this alternative would require a zoning change from CS to R-1-N. Based on a 6,000 square foot lot size, this alternative could provide 138 number of new housing units.

Summary of Impacts Alternative 4

Aesthetics

Residential development would be compatible with the existing adjacent neighborhood. Beneficial impacts expected.

Air Quality

Construction of residential units would likely produce the same amount of dust in the air as the proposed project. However, because of the number of vehicular trips produced by housing, operationally there would be more air pollutants produced than the proposed project. Adverse impacts are anticipated to air quality.

Hazards and Hazardous Materials

The construction of single-family homes could require more remediation than the proposed project. Normally, site remediation is done according to RWQCB standards and then a Health Risk Assessment study is done. However, on this site because the main constituents of concern are petroleum products, there is usually no additional remediation required. No Significant adverse impacts are anticipated.

Hydrology and Water Quality

Single-family homes would produce more storm water run-off and will produce more wastewater than the proposed project. Adverse impacts anticipated.

Land Use and Planning

Under this alternative, the General Plan would be followed and would increase the housing supply for the City as called for by the Housing Element. Single-family housing would be compatible with the adjacent neighborhood, however, would not be compatible with the adjacent freeway system. Adverse impacts are anticipated.

Noise

This alternative would produce similar amounts of noise and disturbance during construction as would the proposed project. Again, because self-storage is a "quiet use", it would produce less operational noise from people and vehicles. Significant adverse impacts are anticipated.

Public Service

This alternative would use much many public service resources, than self-storage. The homes would require increased fire protection, police protection, schools, parks and library services. Significant adverse impacts are anticipated.

Recreation

This alternative would produce a need for more park space, based on the Open Space and Recreation Element's goal of the City having 8 acres of parkland for every 1,000 people. Significant impacts are expected.

Transportation

This alternative would result in additional vehicular trip traffic. In addition, access for this type of development would occur at Baker Street, thus adding these trips to the adjacent neighborhood. Significant impacts are expected.

Environmentally Superior Alternative

Section 15126.6(e)(2) of the CEQA Guidelines indicated that an analysis of alternatives to a proposed project shall identify and environmentally superior alternative among the alternatives evaluated in the EIR. The Guidelines also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

- 1. The No Project/No Development Alternative would not be the environmentally superior alternative because the project site would not be remediated in the near-term. The proposed project would ensure that the entire site is remediated to standards set by the Regional Water Quality Control Board, before development occurs. In addition, this alternative would not provide a block wall noise buffer or landscape along Golden Avenue.
- 2. The Light Industrial Alternative would not be the environmentally superior alternative because it would create more potentially significant impacts than the proposed project. This use would generate more noise because of the nature of the operation. In addition, office workers and trucks traffic would increase and with access from Baker and Golden, these trips would go through the adjacent neighborhood. Short-term construction noise and air quality would be roughly equivalent, however, operational impacts associated with this alternative are more significant.
- 3. The Passive Park Alternative would not be the environmentally superior alternative because of the following reasons. While short-term impacts would be reduced, long-term traffic in the adjacent neighborhood would increase, along with noise from the use as it would not be bordered by a block wall. In addition, public services could be impacted by increased police calls because of the remoteness of the site. The proposed project will have surveillance and security measures required. Also, the timing of remediation of the entire site would be uncertain, which is potentially significant.
- 4. The No Project/Implementation of the Existing General Plan would not be the environmentally superior alternative because of the following reasons. Short-term construction noise and air quality would be roughly equivalent, however, operational impacts associated with this alternative are more significant. Residential projects also use more water and generate wastewater, noise, and traffic.

Because of the above comparison discussion, the proposed project is considered the environmentally superior project.

Areas of Controversy and Issues to be Resolved

The principal areas of controversy are the matter of compatibility with the existing nearby residential and site remediation. The issues to be resolved are the adequacy of the mitigation to minimize the impacts.

SECTION 2

INTRODUCTION

This Environmental Impact Report analyzes the potential environmental impacts of a proposed self-storage facility at 712 West Baker Street. The project includes the environmental remediation of on-site contamination, as well as the grading and construction of an approximately 516,135 square foot self-storage with interim RV parking for up to 650 vehicles. This is to be a phased project as follows:

Phase I will contain 106,000 square feet of single story self storage in seven buildings, of which 2,000 square feet will be the rental office, with approximately 720 storage units;

Phase II will consist of 76,000 square feet of one, two, and three story (not to exceed 28 feet) self storage units, in two buildings, for approximately 650 storage units;

Phase III will consist of 97,000 square feet of one and two story self storage in six buildings, for approximately 850 storage units;

Phase IV will consist of 237,135 square feet of storage housed in six two-story buildings, for approximately 995 storage units.

During the construction of Phase 1 and subsequent phases, portions of the lot are proposed to be used for RV parking and storage. The project timing after site remediation is as follows:

Phase 1: 9 months Phase 2: 18 months

Phase 3: 18 months
Phase 4: 18 months

The total project construction time, from start to finish, would be 63 months or 5 ½ years.

*It is important to note, that, for CEQA purposes, the analysis of potential environmental impacts is done with a "worst case" scenario. That is, the assumption is that the entire project will be constructed simultaneously and not phased, as described above.

The purpose of the Environmental Impact Report is to provide objective planning and environmental information to guide and assist approving agencies and the public of the potential environmental impacts that may result from the full build out of the project.

The reader should take note that different components of the project are expected to be phased over an extended period of time. Certain components of the project may be reduced in intensity, deferred or eliminated entirely depending on the nature of the future market.

Each project component may be required to obtain additional approvals and may require subsequent environmental review for any substantial change in the scope or intensity of the project.

This Environmental Impact Report has been prepared in accordance with the guidelines established for such documents under the California Environmental Quality Act (CEQA) of 1970, as amended. Supplemental guidelines for the preparation of the report were provided by the State of California Office of Planning and Research (OPR)

The principal objectives established under CEQA for environmental impact review are that (1) the process be an open one, and that (2) the report be an informational document, informing decision makers, technical reviewers, and the general public about the potential environmental impacts associated with the construction and operation of the proposed project. The Environmental Impact Report is also required to propose and describe mitigation measures that will reduce significant adverse impacts generated by the project, and to develop reasonable alternatives to the proposed project which may reduce these impacts while still achieving the goals and objectives of the project.

The California Environmental Quality Act Guidelines, under Section 15151, contains the following standards for Environmental Impact Report adequacy:

"An Environmental Impact Report should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes an account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an Environmental Impact Report is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an Environmental Impact Report inadequate, but the Environmental Impact Report would summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure."

In addition to these guidelines, the State Resources Agency has indicated that its intent is to define a reasonable standard of adequacy for analysis and disclosure within Environmental Impact Reports, in order that the documents would not

result in the enormous and burdensome technical documents encountered in the past.

In order to comply with CEQA guidelines, the Initial Study for the proposed project was prepared and circulated and solicited public agency comments through distribution of a Notice of Preparation. The Initial Study document and comments received in response to the Notice of Preparation were the basis of the technical focus of the Environmental Impact Report.

The Environmental Impact Report is divided into ten major sections:

- 1.) <u>Project Description</u> Presents and discusses project objectives, project location and boundaries, specific project characteristics, and a list of the permits, agreements, and approvals that the proposed project needs prior to construction.
- 2.) <u>Project Context</u> Provides context and background for the project through an overview and description of the environmental setting and historical setting of the proposed project site.
- 3.) <u>Cumulative Project Descriptions</u> Presents a compilation of related projects within relatively close proximity which, as of the date of this report, have been proposed, are likely to be constructed, or are likely to be occupied within the approximate time frame of the proposed project's completion. These "related" projects, taken together with the proposed project, are the basis for the cumulative impacts analysis which is presented in the Analysis of Environmental Issues section.
- 4.) Analysis of Environmental Issues Describes the existing conditions found at the project site and assesses the potential environmental impacts that may be generated by development of the proposed project. These potential project impacts are compared to thresholds of significance in order to determine their potential significance. Significant impacts are identified as those impacts which exceed the established thresholds. Mitigation measures, intended to reduce potential adverse impacts to acceptable levels, are proposed where possible. Those impacts which cannot be eliminated or mitigated to acceptable levels, are also identified. The cumulative impacts of development of the proposed project, in addition to related projects, are assessed.
- 5.) <u>Growth-Inducing Impacts</u> Identifies potential spatial, economic, or population growth impacts, both short-term and long-term, that may be created or fostered by development of the proposed project.
- 6.) <u>Alternatives</u> Presents and analyzes the potential environmental impacts of alternatives to the proposed project, including a no-project alternative. The

- impacts of these alternatives are then compared in relation to each other and in relation to those of the proposed project.
- 7.) <u>Organizations and Individuals Consulted</u> Lists all federal, state, and local agencies, community groups, and other organizations and individuals consulted during the preparation of this Environmental Impact Report.
- 8.) <u>Mitigation Monitoring Plan</u> For any mitigation measures recommended to reduce potential impacts to the extent feasible, the plan describes the measure, provides when the mitigation is applied, and what agency is responsible for the enforcement of the measure.
- 9.) <u>References</u> Lists all sources, including published materials, written correspondence, and verbal communication, used in the preparation of this Environmental Impact Report.
- 10.) <u>Appendices</u> Includes copies of documents that were prerequisites to, or are related to, the preparation of this Environmental Impact Report, including the Initial Study, comments received in response to the Notice of Preparation, background data, and studies utilized in preparation of this Environmental Impact Report.

SECTION 3

PROJECT DESCRIPTION

PROJECT LOCATION

The project site is situated within the southeastern quadrant of Los Angeles County in the City of Long Beach, as indicated in Exhibit 3-1, Regional Map. The City of Long Beach is a highly urbanized coastal community, and the project is located in the west-central portion of the City.

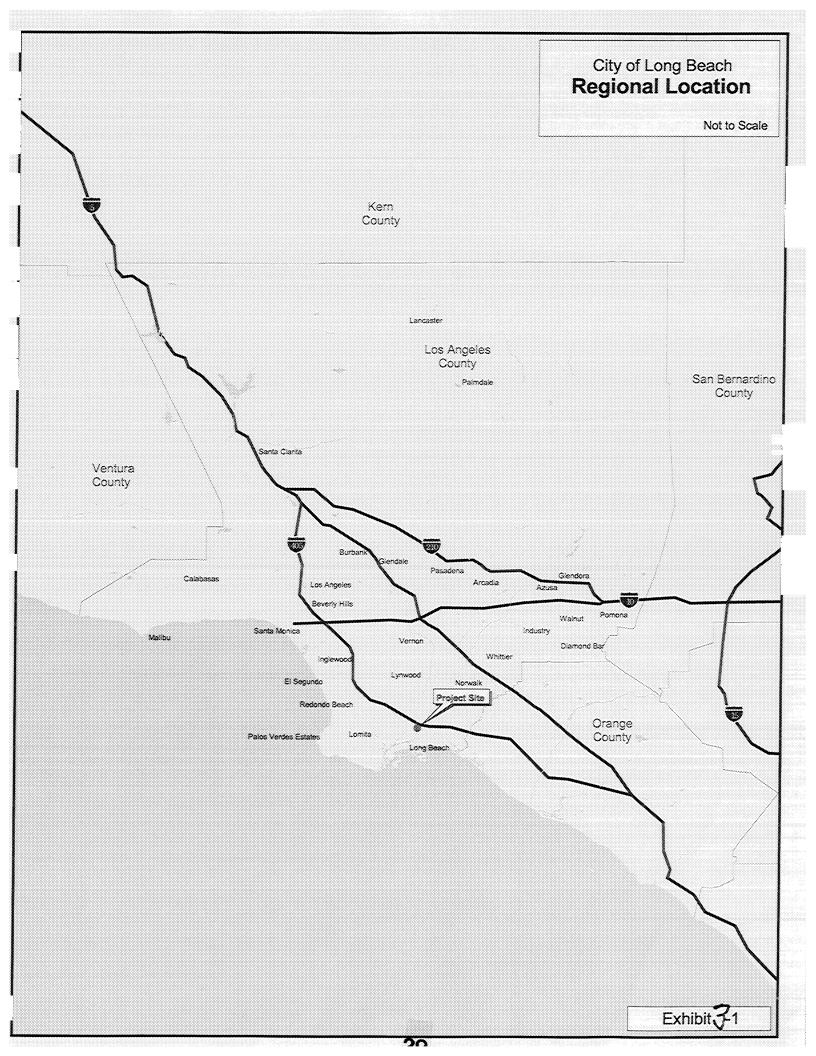
The project site is bordered by the Los Angeles River to the East, the San Diego Freeway (I-405) to the North, Golden Avenue to the East, and Wardlow Road to the South. There are residential neighborhoods located to the East of the project site.

The project site comprises approximately 20 acres of a former water/oil separation site owned by Oil Operators Inc. and was operated as such for many years. The site is no longer used for oilfield operations although much of the infrastructure involved with the former use is still onsite. There are presently no buildings located on the project site.

Existing vegetation on the site consists of generally common ornamental plant species. These plants are mostly the result of prior use, but some species have migrated onsite. Generally the plants, although mature, are in poor to bad condition due to lack of care, water, and soil contamination. In the case of grasses and herbaceous material, there is no evidence of sensitive species such as the Southern Tar Plant on site.

SITE PREPARATION

The project site was used for many years in oilfield production as an oil/water separation site. Much of the infrastructure for the previous use (settling ponds, pre-treatment tanks, clarifier tanks, pipelines) is still in place and will need to be removed before project construction is able to commence. Once this infrastructure is removed, the project site will need to undergo environmental remediation to cleanup all existing soil contamination and any potential groundwater contamination. Once the site cleanup is deemed adequate by the agencies involved in the oversight of the cleanup (Los Angeles County Regional Water Quality Control Board, City of Long Beach Health and Human Services Department) the applicant will be able to apply to the City for grading permits to commence preparation of the site for structures to be built.



PROJECT CHARACTERISTICS

The project will consist of a total of 516,135 square-feet of recreational vehicle and self-storage to be done in 4 phases.

Phase I will contain 106,000 square feet of single story self storage in seven buildings, of which 2,000 square feet will be the rental office, with approximately 720 storage units;

Phase II will consist of 76,000 square feet of one, two, and three story (not to exceed 28 feet) self storage units, in two buildings, for approximately 650 storage units;

Phase III will consist of 97,000 square feet of one and two story self storage in six buildings, for approximately 850 storage units;

Phase IV will consist of 237,135 square feet of storage housed in six two-story buildings, for approximately 995 storage units.

During the construction of Phase 1 and subsequent phases, portions of the lot are proposed to be used for RV parking and storage. The project timing after site remediation is as follows:

Phase 1: 9 months Phase 2: 18 months Phase 3: 18 months Phase 4: 18 months

The total project construction time, from start to finish, would be 63 months or 5 ½ years.

PROJECT APPLICANT

The project is initiated and proposed by:

David Hadjes

Self-Storage Associates 5318 East 2nd Street, #195 Long Beach, California, 90803

The property owner is:

Oil Operators Inc.

1065 West Pier E Street

Long Beach, California, 90802

The Lead Agency is:

The City of Long Beach
Planning Commission

333 West Ocean Boulevard,

4th Floor

Long Beach, California, 90802

OBJECTIVES

The applicant seeks to accomplish two primary goals. The first is to environmentally remediate an existing contaminated parcel of land of approximately 20 acres in size; the second is to, once the land is remediated to the satisfaction of all agencies involved, develop this land into a productive commercial use. The following additional project objectives are intended to implement these goals, as well as to serve as a basis for comparing the project with alternative developments:

- To meet the demand within the area for neighborhood selfstorage facilities
- To redevelop a presently blighted parcel of land with development constraints to an economically viable and more attractive use
- To convert a former incompatible industrial use to one that is more compatible with the adjacent neighborhood
- To create a development that will not pose a health hazard to the surrounding neighborhood
- To provide a transitional buffer between the residential neighborhood to the East, and the Long Beach Freeway (I-710), the Los Angeles River, and the San Diego Freeway (I-405) to the West and North.

The applicant's objectives in securing development of the project site are consistent with the Zoning designation for the property, but are inconsistent with the General Plan Land Use Designation for the property. The current Zoning Designation for the property is CS (Commercial Storage), which allows the type

of use the applicant is proposing. The current Land Use Designation is LUD-1 (Single Family Residential) and will require an amendment to the City's General Plan. There is a small legal parcel lot at the southwest corner of the subject property that is presently zoned R-1-N (Single-family Residential, standard lot) that is not a part of the proposed project.

DISCRETIONARY PERMITS

The purpose of the Environmental Impact Report for the proposed project is to analyze and disclose potential environmental impacts to the public and decision makers. The EIR will be used by the City Planning Commission, the City Council, and other interested agencies in their respective decision making processes and in connection with the issuance of all discretionary and/or ministerial permits necessary or desirable to implement the proposed project including, without limitation, the following:

- Site Plan Review
- Remediation of Existing Site Contamination
- General Plan Amendment
- Lot Merger if Applicable
- Street Vacation if Applicable

OTHER PUBLIC AGENCIES WHOSE APPROVAL IS REQUIRED

<u>City of Long Beach Planning Commission</u>: Certification of Environmental Impact Report, approval of Site Plan Review, approval of General Plan Amendment, Conformancy Finding for Street Vacation, and Lot Merger.

<u>Long Beach City Council:</u> Approval of General Plan Amendment, and Street Vacation

City of Long Beach Department of Planning and Building:

Planning Bureau: Check final development plans for consistency with approval.

Building Bureau: Check final development plans for consistency with approvals and Building Code compliance.

<u>Long Beach Department of Health and Human Services:</u> Cleanup and remediation of the entire project site.

Los Angeles County Regional Water Quality Control Board: Cleanup and remediation of entire project site, including all soil and groundwater contamination.

Intended use of this EIR:

This Environmental Impact Report will be utilized by the various State, County and Local Agencies and the citizens of Long Beach in formulating positions and acting upon the above permits.

SECTION 4

SURROUNDING LAND USE

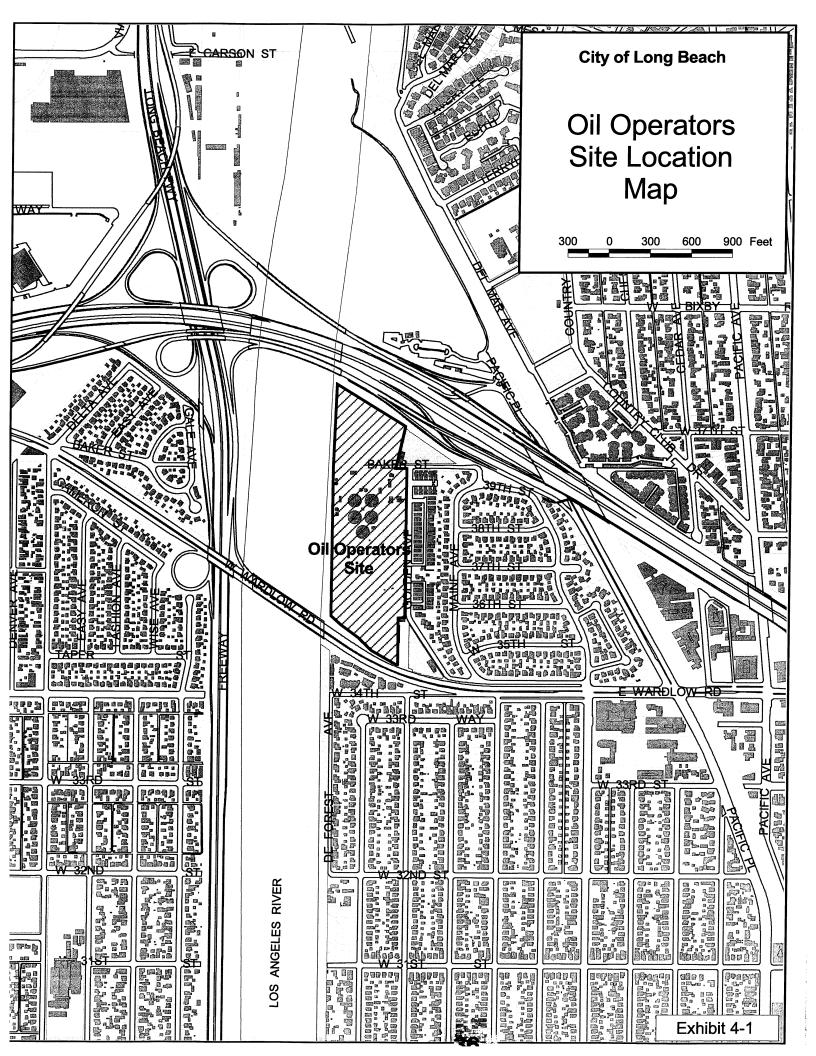
The site is located within the west-central portion of the City of Long Beach. The primary Neighborhood and Business Associations within the project vicinity are the following:

- Wrigley Heights Committee
- Wrigley Association
- Wrigley Village Business Association
- Los Cerritos Improvement Association

The Community Planner for the area is Jorge Ramirez.

The general character of the project area is one of a vacant, former industrial use (refer to Exhibit 4-1, site map). The approximately, 20 acre site, was used for many years as an oilfield production water treatment site, but has not been in active use since 1998. The site is bounded by the San Diego Freeway (I-405) to the north, Golden Avenue the east, Wardlow Road to the south, and the Los Angeles River to the west.

Existing residential neighborhoods are located to the south and east of the project site. The Los Angeles River Bike Trail runs along the western border of the project site, adjacent to the Los Angeles River. There are no active commercial or industrial uses within close proximity to the project site.



SECTION 5

CUMULATIVE IMPACTS

The California Environmental Quality Act, Section 15355 defines "cumulative impacts" as two or more individual effects that, when considered together are either considerable or compound the environmental impacts. These cumulative impacts are the changes in the environment that result form incremental impact of development of the proposed project and other nearby projects. The method of cumulative impact analysis utilized in this documents allows the Environmental Impact Report to provide a reasonable forecast of future environmental conditions that can more accurately gauge the effects of a series of projects. This analysis is presented in each resource section.

In general, the area is "built up". The City of Long Beach has acquired two parcels of land, one at each end of the subject site. This land is programmed for future park uses. In addition, the following projects are within the sphere of influence of the proposed project.

North Long Beach Police Station	4891 Atlantic Avenue
Medical Office	2702 Long Beach Blvd.
Retail/Fast Food	3400 Long Beach Blvd.
Retail Fast-Food	3918 Long Beach Blvd.
Pharmacy w/ Drive-Through	3570 Atlantic Avenue
Retail	1422 W. Willow St.
Self-Storage Facility	3401 Golden Avenue
Medical Office	2760 Atlantic Avenue
Retail	4085 Atlantic Avenue
Home Depot (Signal Hill)	Atlantic/Spring
	Medical Office Retail/Fast Food Retail Fast-Food Pharmacy w/ Drive-Through Retail Self-Storage Facility Medical Office Retail

While these projects are some distance from the project site and generally will not contribute to cumulative impacts when considered with the proposed project, the project traffic study included trip generation and distribution as it relates to the above listed cumulative projects.

SECTION 6

ANALYSIS OF ENVIRONMENTAL ISSUES

As required by the California Environmental Quality Act, analysis of the potential environmental impacts of development of the proposed project has been completed. The following potential impact areas were identified as needing specific analysis for this proposed project:

- Aesthetics
- Air Quality
- Biological
- Cultural
- Geology/Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use/Planning
- Noise
- Population and Housing
- Public Services
- Transportation and traffic
- NPDES
- Utilities and Service Systems

In terms of format, the impact analysis section for each issue addressed is presented in the sections below:

- <u>Existing Setting</u>: This subsection provides information describing the existing conditions on or surrounding the project site, which may be subject to change as a result of the proposed project.
- Anticipated Impacts: this subsection provides information on the characteristics of the proposed project, which would have an effect with regard to the environment in and around it, the nature and extent to which the project is expected to change the existing environment and whether or not the project impacts meet or exceed the threshold levels of significance.
- <u>Mitigation Measures</u>: This subsection identifies the specific mitigation measures proposed to reduce the significant adverse impacts identified.
- <u>Cumulative Impacts</u>: This subsection discusses the combined effects of the proposed project and the future nearby projects.
- <u>Unavoidable Adverse Impacts</u>: This subsection identifies the residual effects of the proposed park, which will result even after the proposed mitigation measures are implemented.

THRESHOLDS OF SIGNIFICANCE

<u>Aesthetics</u>: Cause an adverse and inappropriate visual impact to the receiving land use.

<u>Air Quality</u>: Exceed the thresholds of the South Coast Air Quality Management District pollutant criteria:

Carbon Monoxide	550 lbs per day
Sulfur Dioxide	150 lbs per day
Nitrogen Oxides	100 lbs per day
Particulate	150 lbs per day
Reactive Organic Gases	75 lbs per day

<u>Biological</u>: Substantially affects a rare or endangered species of animal or plant or habitat of the species or interferes with the movement of any resident of migrating fish or wildlife species.

<u>Cultural</u>: Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surrounding, such that the significance of a historical resource would be materially impaired.

<u>Geology and Soils</u>: Project grading and or construction which would cause displacements, compaction or over covering of soil such that the proposal poses a reasonable certainty of endangerment by ground failure or other hazards to people on and off site, or if a unique physical feature is damaged, destroyed or created.

<u>Hazards and Hazardous Materials</u>: Create a significant hazard to the public or the environment.

<u>Hydrology and Water Quality</u>: Production of runoff which cannot safely be accommodated within the sewer control system.

<u>Land use and Planning</u>: Non conformance with the relevant goals and policies of the North Long Beach Redevelopment Plan, the General Plan, Zoning and or result in significant incompatible land use.

Noise: Generation of noise levels which exceed the State Health and Safety Code standard of 65 dBA Ldn for exterior space and 45 dBA Ldn for interior space or otherwise violates the Long Beach Noise Regulations.

<u>Population and Housing</u>: Generates a significant demand which cannot reasonably be met.

<u>Public Services</u>: Responses from the responsible service agencies will indicate whether the additional demand generated by the proposed community park can be accommodated. If such demand cannot be reasonably accommodated, project impacts will be considered to be significant.

<u>Traffic and Circulation</u>: Traffic operational levels will be measured in terms of Intersection Capacity Utilization indices for intersections in the vicinity of the project. Impacts are considered to be significant if traffic increases will result in the intersection's Level Of Service falling below "d" Level of Service.

<u>Parking</u>: The adequacy of the proposal's parking will be measured against the standards set forth in the Zoning regulations and by a traffic consultant. If the proposal does not meet the parking demand as anticipated by a transportation expert an adverse impact shall occur.

IMPACT ANALYSIS

I. AESTHETICS

Methodology

The assessment of aesthetic impacts is, by its nature, a subjective exercise. This analysis attempts to identify and objectively examine factors that contribute to the perception of aesthetic impacts. Potential aesthetic impacts can be evaluated considering proposed grade separations, landform alteration, building setbacks, scale, massing, typical construction materials, and landscaping features associated with the design of the proposed project. It should be noted, however, that there are no defined standards or methodologies for the assessment of aesthetic impacts, only those thresholds based on the guidelines for the implementation of CEQA, combined with additional input garnered through discussions with City Staff. Edge conditions and view shed alteration are considered in the context of these factors, to the extent such information is known. The aesthetic compatibility of the proposed project with the surrounding area and potential impacts to sensitive views are examined.

Existing Setting

The areas to the east and south of the site consist primarily of single-family homes. Wardlow Road, a major east-west arterial, is situated between the project site and the residential neighborhood to the south. The Los Angeles River is located to the west, and the San Diego Freeway (I-405) is located to the north. A paved bicycle path runs along the eastern side of the channelized portion of the Los Angeles River. Two small parcels of land to the immediate northeast and southeast of the project site have been acquired by the City of Long Beach for later development as neighborhood parks. Views of the site in its current condition are depicted within Exhibits 6-I-1.1 through 6-I-1.6.

There are no current uses on the project site, but there are remnants of the former oil/water separation facility operated by Oil Operators Inc. Structures on the site include pre-treatment and clarifier tanks as well as two open settling ponds. The pre-treatment tanks are circular concrete structures approximately eight feet in height and twenty feet in diameter, and the clarifier tanks are circular concrete structures approximately ten feet in height and 100 feet in diameter. Other than subterranean pipelines affiliated with the former use and utility conveyances, there are no other known structures on the site.

The single-family homes located on the east side of Golden Avenue, adjacent to the eastern boundary of the project site, are currently visually impacted by the existing conditions of the site. The site is fenced along the perimeter and is

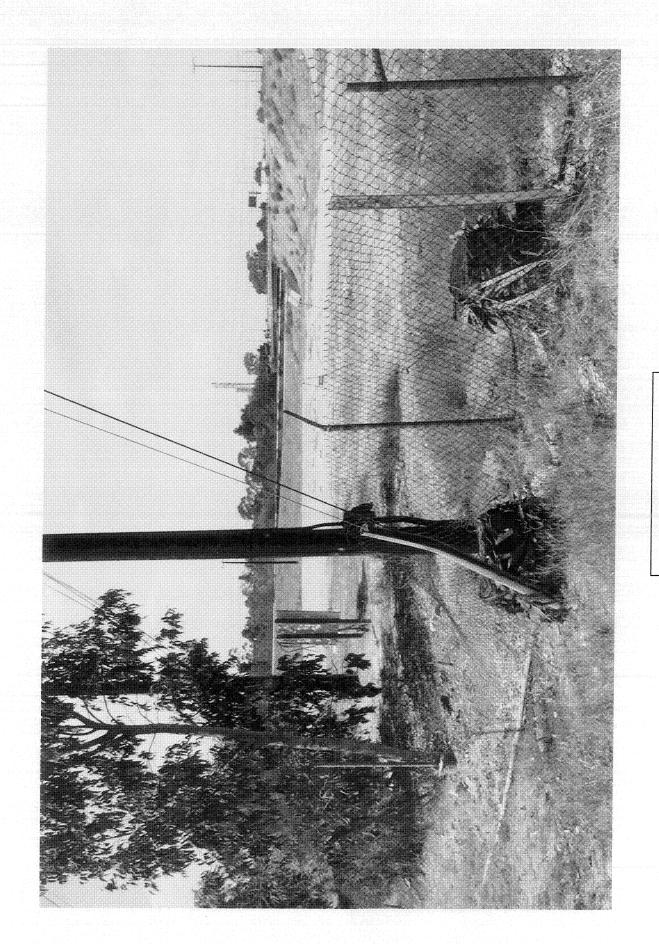
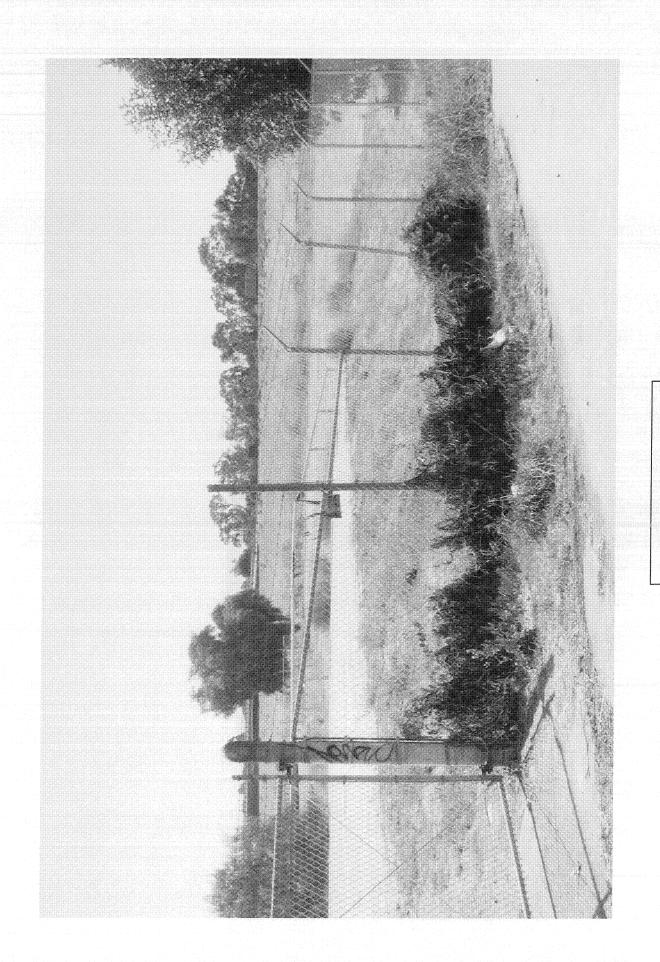


Exhibit 6-1-1.1



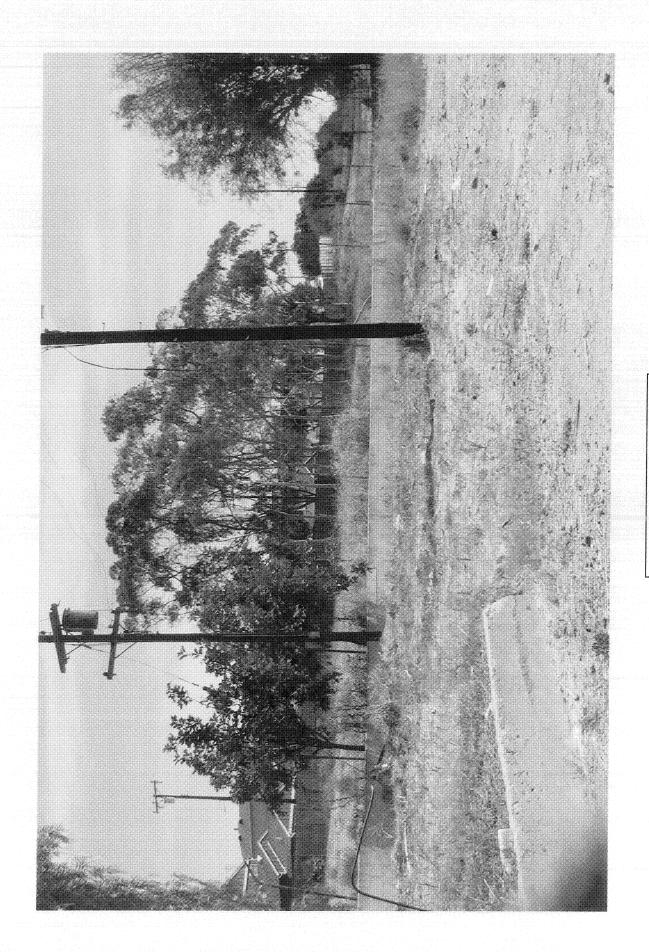




Exhibit 6-1-1.4

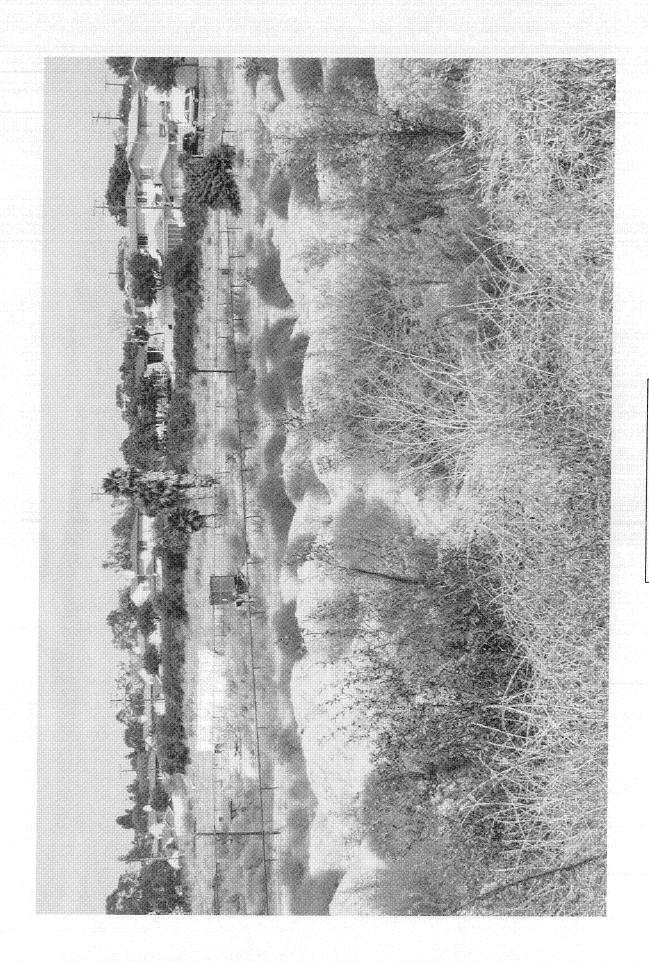


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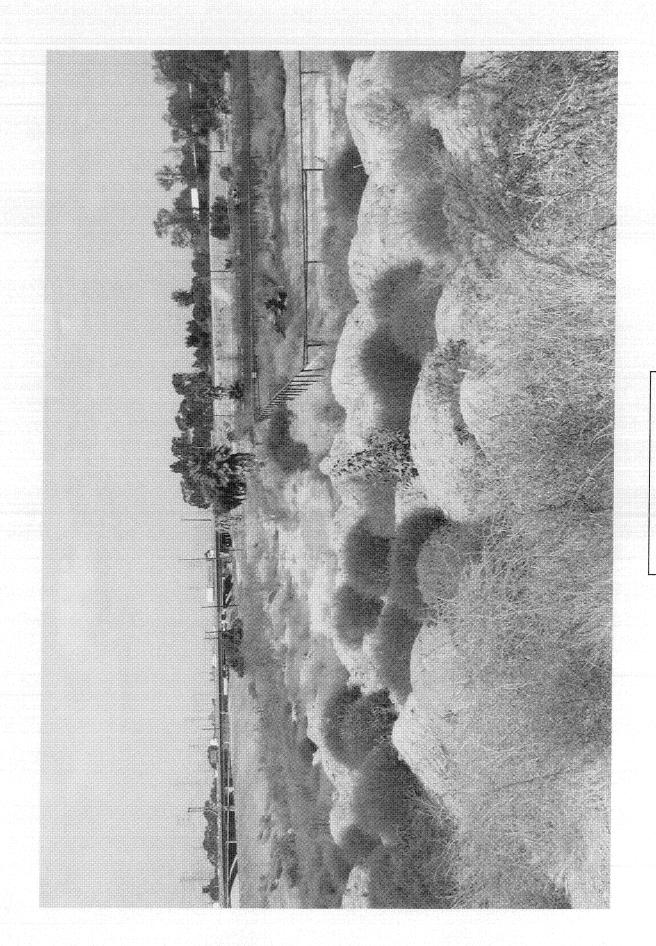


Exhibit 6-1-1.6

partially screened along the eastern property line only. There is relatively little vegetation on the site, other than common grass species and a few trees.

The most unobstructed views of the project site are from Wardlow Road, just south of the project site, from the I-710 north to I-405 south transition road located just north of the project site, and from the Los Angeles River bike trail. Along Golden Avenue, the project site is presently screened with a chain-link fence with opaque screening material, as well as a pre-fabricated concrete wall.

ADVERSE EFFECTS ON A SCENIC VISTA

Impact Analysis

The project site, as has been described earlier in this section, is not pristine and most, if not all, of the site could be considered visually degraded. It should be noted that while one of the goals of the City of Long Beach Open Space and Recreation Element of the General Plan is to "Work to acquire and restore lands along the San Gabriel and Los Angeles Rivers, and wetland habitats and greenways." (OSRE Program 1.4) and that the project site is identified on the Los Angeles County Department of Public Works 'Los Angeles River Master Plan' as open land for a City proposed park, no aesthetic or visual resources have been designated in any policy plan that applies to the project site or to any immediately adjacent areas.

While build-out of the proposed project would result in the loss of potential open space for parkland and recreation, the project is not anticipated to have substantial adverse effects on scenic vistas, and may result in the enhancement of some views due to the elimination of un-maintained former uses currently existing on the project site.

DAMAGE TO A SCENIC RESOURCE

Impact Analysis

There are no designated scenic resources on the project site and no scenic highways located in the vicinity of the project area. The Los Angeles River, located adjacent to the project site, is channeled with concrete in this area and is not in a natural state. The entirety of the project site has been previously disturbed by human activities and consists of a former oil/water separation facility used in oil production, and non-native vegetation. The existing visual character of the project site could be considered visually degraded due to the abandonment of the structures located on the site and the overgrown vegetation in those areas where vegetation exists. Many of the trees located onsite are mature and in varying degrees of health. While tree removal will alter the visual

character of the site, the tree specimens that would be removed are not considered visually scenic and the impact of their removal would be minimized by new landscaping proposed in the project.

The proposed development would, however, result in a more visually intense coverage of the site with structures and other improvements, and would add a substantial amount of trees and ornamental vegetation to the eastern side of the property. Although the proposed development would alter the intensity of development on most of the site and substantially change the visual character of the site, these changes are not considered adverse relative to the presently existing conditions on the site. Consequently, no damage to any significant scenic resources on-site would occur as a result of the project.

CREATION OF A NEW SOURCE OF LIGHT OR GLARE

Impact Analysis

Additional nighttime lighting would be associated with development of the site. The project would include the use of low intensity street lighting along Golden Avenue to preserve a suburban character similar to surrounding residential areas. The use of pedestrian-scaled street lighting and provision of setbacks and landscaping of the proposed development would also reduce potential impacts on surrounding areas from new sources of nighttime lighting. It is anticipated that more intense security lighting would be used within the interior of the site, and measures to control spillage from new light sources such as street lighting, pedestrian lighting and security lighting are recommended, and have been included below.

CONSTRUCTION-RELATED AESTHETIC IMPACTS

Impact Analysis

Construction activities over the build-out of the project area such as grading, building construction, and the movement of construction equipment throughout the site and on- and off-site could potentially impact receptors with unobstructed or partially obstructed views of the site, as well as those who travel through the area via automobile. Views of the construction area would be prominent for travelers eastbound and westbound on Wardlow Road. In addition, construction activities would also be visible from the residential uses located to the east of the project site along Golden Avenue, as well as from Baker Street east of Golden Avenue.

The proposed project will remediate existing site contamination and redevelop a currently vacant and blighted parcel into a productive commercial use.

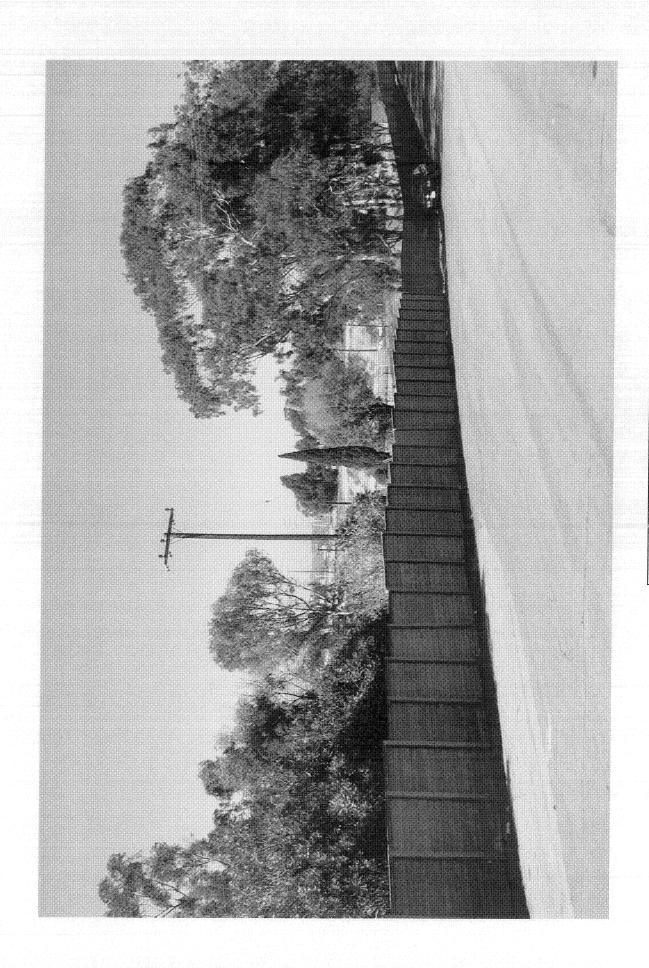
Preliminary plans have been prepared for the proposed site and are included in the Appendix. The proposed office building is a mix of Colonial Revival and Craftsman style architectural elements and the actual storage units are rather non-descript concrete block buildings, typical of architectural styles found at other modern self-storage facilities.

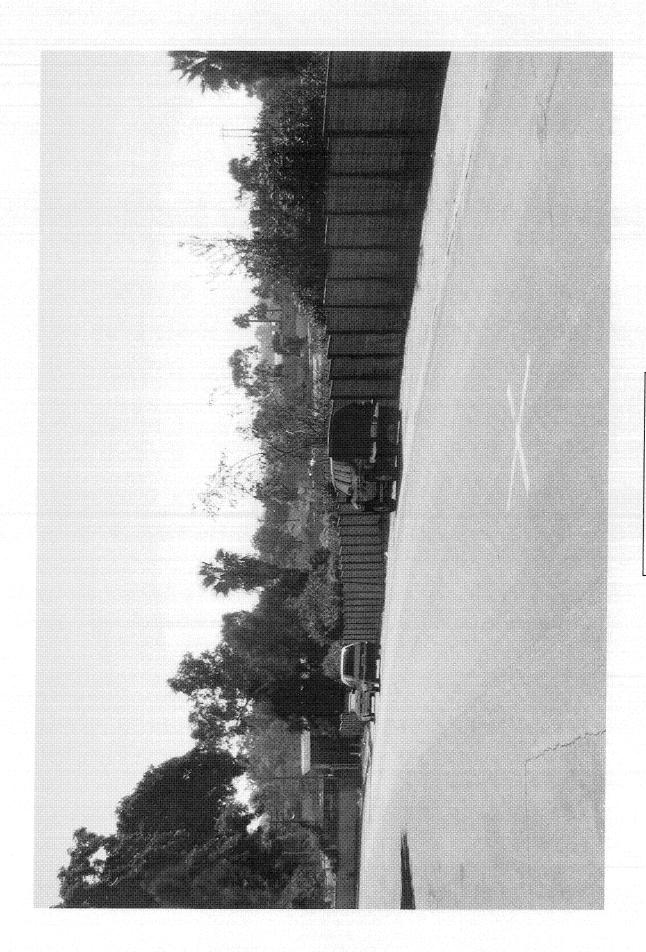
Exhibits 6-I-2.1 through 6-I-2.4 illustrate the character of views currently existing from adjacent residential areas. Nighttime lighting may be necessary for security.

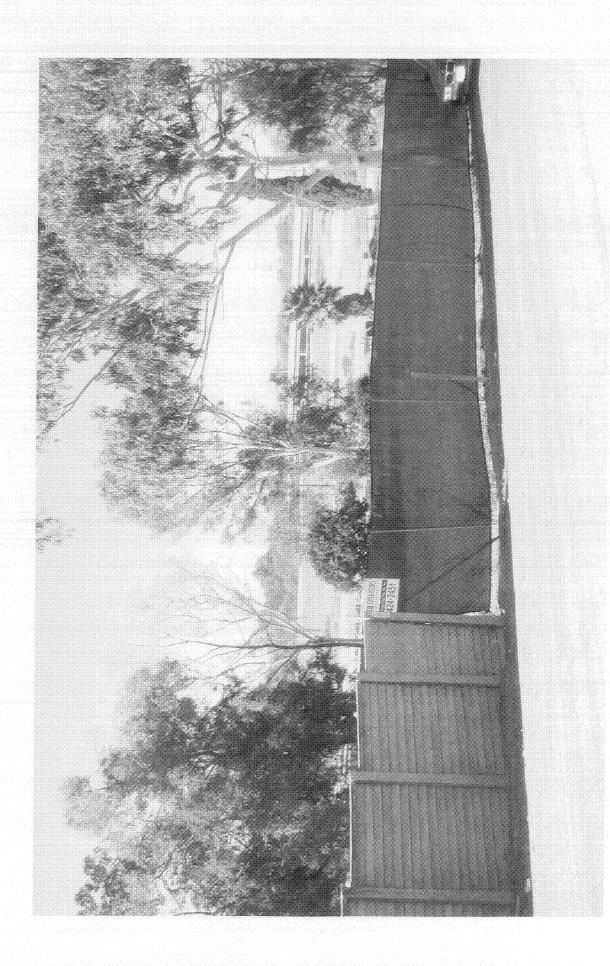
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Exhibit 6-1-2.1







in active construction areas. Light and glare related to construction activities could potentially affect adjacent roadways and adjacent residences, especially those along Golden Avenue in close proximity to the site and could be potentially significant if not properly screened and controlled. To mitigate these concerns, construction contractors shall be required to use non-glare directional lighting when lights are required for safety and security inn construction areas.

The project applicant has proposed a landscape buffer and screening wall between Golden Avenue and the project site. This landscaped area is approximately twenty feet in width and will consist of ornamental landscaping, a paved walkway, decorative lighting, and sheltered bench areas. The screening wall is approximately eight feet high. See Exhibits 6-I-3.1, 3.2, and 3.3

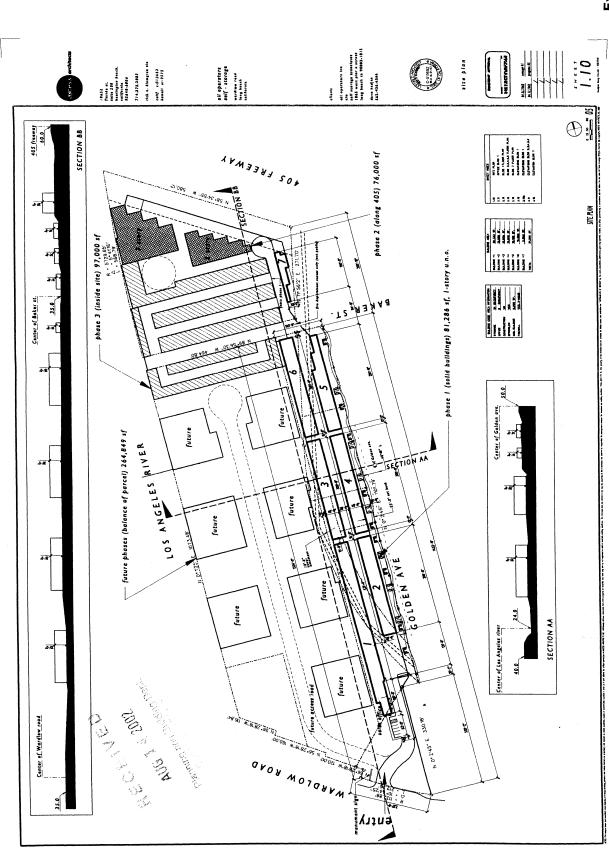
These construction related impacts on aesthetics would be short-term, but are potentially significant as there are sensitive receptors in proximity to the project site. Construction activities would also be highly visible to motorists traveling on Wardlow Road, and the I-710 north to I-405 south transition road. The following mitigation measures would assure that construction related visual impacts would be less than significant.

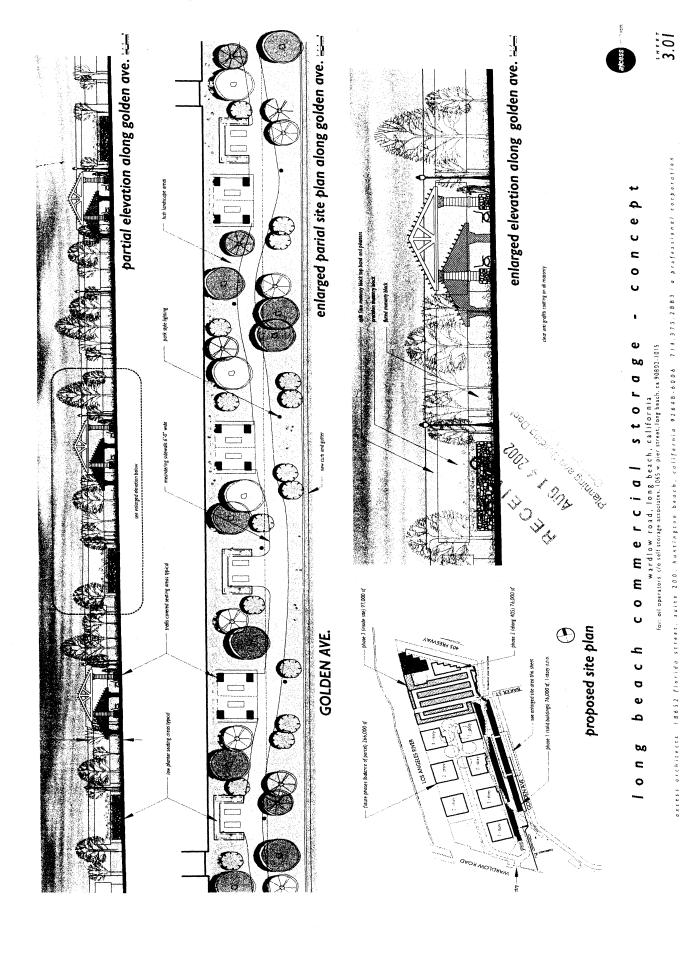
Mitigation Measures

- I-1 All exterior security lighting shall be screened in such a way that it does not spillover into adjacent properties and shall be placed or mounted in such a way that it is not directly visible from the I-710 north to I-405 south transition road, and also from Wardlow Road.
- I-2 All lighting along Golden Avenue and adjacent to residential areas shall be of a type, design, and intensity compatible with existing neighborhood lighting.
- I-3 Construction contractors shall use non-glare, directional lighting to minimize potential light and glare impacts when lights are necessary for nighttime safety and security in the construction area.
- I-4 The proposed security/screening wall separating the landscaped area on the eastern boundary of the project site with the remainder of the project site, shall be constructed prior to any building construction, or grading related to building construction, to minimize the adverse aesthetic impact of project construction.

Cumulative Impacts

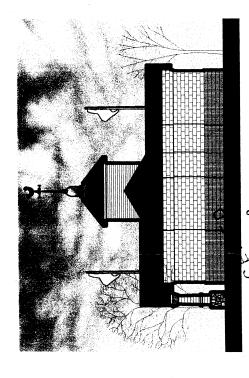
No cumulative impacts are anticipated as a result of the project with respect to Aesthetics.







= SOUTH ELEVATION - OFFICE



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EAST ELEVATION - OFFICE

NORTH ELEVATION - OFFICE



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18652 Florids street, suite 200, huntington beach, california 92648-6006

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714.375.2883

Unavoidable Significant Impacts

With mitigation measures, no unavoidable significant impacts are anticipated as a result of the project with respect to Aesthetics.

II. AIR QUALITY

Methodology

The proposed project consists of the environmental remediation, demolition of existing structures, and construction of a 516,135 square-foot self-storage facility consisting of approximately 3,215 individual storage units located west of Golden Avenue between Wardlow Road and the San Diego Freeway (I-405).

The following characterization of the baseline atmospheric environment includes an evaluation of the ambient air quality and applicable rules, regulations, and standards for the area. Because the proposed project has the potential to release gaseous emissions of criteria pollutants and particulate matter into the ambient air, it falls under the ambient air quality standards promulgated on the local, state, and federal levels. The impact analysis was prepared in accordance with methodology and standards included in the South Coast Air Quality Management District's (SCAQMD) CEQA Air Quality Handbook.

Existing/Climatic Setting

Terrain and geographical location determine climate in the South Coast Air Basin. The Basin is a coastal plain with connecting broad valleys and low hills. The Pacific Ocean forms the southwestern border and high mountains surround the rest of the basin. The region lies in the semi-permanent high-pressure zone of the eastern Pacific. The resulting climate is mild and tempered by cool ocean breezes. This climatological pattern is rarely interrupted. However, there do exist periods of extremely hot weather, winter storms, or Santa Ana wind conditions.

The annual average temperature varies throughout the Basin, ranging from the low to middle 60's, measured in degrees Fahrenheit. With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. All areas in the basin have recorded summer temperatures above 100° F in recent years. January is typically the coldest month in this area of the basin. While winter temperatures rarely get below freezing (especially in more coastal areas), inland areas have recorded minimum temperatures dipping into the 20's.

The majority of annual rainfall in the Basin occurs between November and April. Summer rainfall is minimal and generally limited to scattered thundershowers in coastal regions and slightly heavier showers in the eastern portion of the Basin and along the coastal side of the mountains. The climatological station nearest the site which monitors precipitation is the Long Beach Airport station. Rainfall measured in the Long Beach area averages 12.94 inches annually. During the 2001-2002 season, Long Beach experienced its driest season on record when a

mere 1.89 inches of rainfall was recorded for the entire year. As evidenced in the previous figures, monthly and yearly rainfall totals are extremely variable.

Even though the basin has a semi-arid climate, air near the surface is generally moist because of the presence of a shallow marine layer. With very low average wind speeds, there is a limited capacity to disperse air contaminants horizontally. The dominant daily wind pattern is an onshore daytime breeze and an offshore nighttime breeze. The typical wind flow pattern fluctuates only with occasional winter storms or strong northeasterly Santa Ana winds from the mountains and deserts northeast of the Basin. Summer wind flow patterns represent worst-case condition, as this is the period of higher temperatures and more sunlight which result in atmospheric ozone formation.

During spring and early summer, pollution produced during any one day is typically blown out of the Basin through mountain passes or lifted by warm, vertical currents adjacent to mountain slopes. Air contaminants can be transported 60 miles or more from the Basin by ocean air during the afternoons. From early fall to winter, the transport is less pronounced because of slower average wind speeds and the appearance of drainage winds earlier in the day. During stagnant wind conditions, offshore drainage winds may begin by late afternoon. Pollutants remaining in the basin are trapped and begin to accumulate during the night and the following morning. A low morning wind speed in pollutant source areas is an important indicator of air stagnation and the build-up potential for primary air contaminants.

With persistent low inversions and cool coastal air, morning fog and low stratus clouds are common. However, 73% sunshine is recorded in Downtown Los Angeles. This is an extremely important climatological factor, considering the role of sunshine in the photochemical smog production process. Cloudy days are less likely in the eastern portions of the Basin and about 25% greater along the coast.

The vertical dispersion of air pollutants in the Basin is limited by temperature inversions in the atmosphere close to the earth's surface. Temperature normally decreases with altitude, and a reversal of this atmospheric state, when temperature increases with altitude, is called an inversion. The height from the earth to the inversion base is known as the mixing height.

Inversions are generally lower in the nighttime when the ground is cool than during the daylight hours when the sun warms the ground and in turn, the surface air layer. As this heating process continues, the temperature of the surface air layer approaches the temperature of the inversion base causing heating along its lower edge. If enough warming takes place, the inversion layer becomes weak and opens up to allow the surface air layers to mix upward. This can be seen in the middle to late afternoon on a hot summer day when smog appears to clear

up suddenly. Winter inversions tend to break earlier in the day, preventing excessive contaminant build up.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into Riverside and San Bernardino Counties. In the winter, the greatest pollution problems are carbon monoxide and oxides of nitrogen because of extremely low inversions and air stagnation during the night and morning hours. In the summer, the longer daylight hours and the brighter sunshine combine to cause a reaction between hydrocarbons and oxides of nitrogen to form photochemical smog.

Local Climate

The City of Long Beach is located within the Marine Microclimatic Zone and is therefore subject to more coastal clouds and fog during the spring and summer than those areas located further inland. Summers are cooler along the coast, and generally warmer further inland. The annual mean temperature in the project area is approximately 64° F with relatively little daily or seasonal variation. On rare occasions, temperatures may exceed 100°F or dip below freezing.

Winds in the project area are usually driven by the dominant land/sea breeze circulation system. Regional wind patterns are dominated by daytime onshore breezes. At night, the wind generally slows and reverses direction traveling toward the ocean. Another important wind regime occurs when a high-pressure center forms over the western United States and creates Santa Ana winds which blow from the northeast and east through the project area.

Regulatory Background

Federal Clean Air Act Requirements

Federal, State, and regional control authorities regulate air quality in the basin. The EPA is involved in local air quality planning through the Federal Clean Air Act (CAA), as amended by the Clean Air Act Amendments of 1990. The CAA requires plans to provide for the implementation of all reasonably available control measures as expeditiously as practicable, including the adoption of reasonably available control technology for reducing emissions from existing sources. The CAA explicitly encourages emission control innovations in the form of market-based approaches. The SCAQMD is the first local agency in the country to adopt a market-based approach for controlling stationary source emissions of oxides of nitrogen and sulfur and, in accordance with the pending revisions, is proposing additional market-based control measures. Other federal

requirements addressed in the revision include mechanisms to track plan implementation and milestone compliance for ozone and carbon monoxide.

In addition, the 1990 amendments to the CAA require the SCAQMD to develop the following demonstrations or plans addressed in the 1994 Air Quality Management Plan (AQMP) (discussed below): (1) an ozone attainment demonstration, (2) a post-1996 rate-of-progress demonstration, and (3) a PM_{10} State Implementation Plan (SIP) (required in 1996) that incorporates best available control measures for fugitive sources. The status of these demonstrations and plans is discussed in the following section.

California Clean Air Act Requirements

In addition to federal requirements, the Basin is subject to requirements set by the State. The California Clean Air Act (CCAA) amended in 1992 requires all air districts in the State to endeavor to achieve and maintain State Ambient Air Quality Standards. According to the CCAA, air pollution control districts must design their air quality attainment plans to achieve a reduction in basin-wide emissions of 5% or more per year (or 15% or more in a 3-year period) for all nonattainment pollutants and their precursors. For emission reduction accounting purposes, the California Air Resources Board (CARB) has established a 7-year initial reporting period (1988 to 1994) with reporting intervals every 3 years thereafter. As a result, the 1994 AQMP must seek to achieve a 35% reduction for the initial period and a 15% reduction for every subsequent interval. As reported in the 1997 AQMP discussion below, the SCAB had realized reductions of 20% for volatile organic compounds, 6% for NO_x (both ozone precursors) and 18% for CO₂ for the first reporting period in spite of strong population growth over the period. Thus, to maintain schedule, it would appear that further reductions are necessary for future reporting periods.

The CCAA also requires that the 1994 AQMP control measures reduce overall population exposure to criteria pollutants, with a 40% reduction due by the end of 1997 and a 50% reduction by the year 2000. This provision is applicable to ozone, carbon monoxide, and nitrogen dioxide in the SCAB. These provisions have been met and exceeded. Annual average per capita exposure to ozone is reported down by over 79% in 1995. Furthermore, exposure to both CO and NO₂ are down to zero. The CCAA further requires the SCAQMD's Governing Board to determine that the 1994 AQMP is a cost-effective strategy that will achieve attainment of the State standards by the earliest practicable date.

The 1994 AQMP must also include an assessment of the cost-effectiveness of available and proposed measures and a list of the measures ranked from least cost-effective to the most cost-effective. In addition to cost-effectiveness, other factors must be considered, including technological feasibility, emissions reduction potential, rates of reduction, public acceptability, and enforceability.

Regional Air Quality Management Planning

The SCAQMD and the Southern California Association of Governments (SCAG) are the agencies responsible for preparing the AQMP for the SCAB. Since 1979, a number of AQMP's have been prepared. The most recent comprehensive plan fully approved by the EPA is the 1994 AQMP, which includes a variety of strategies and control measures. The 1994 AQMP was based on the 1991 AQMP and was designed to comply with State and Federal requirements. The goal of the 1994 AQMP was to reduce the high level of pollutant emissions in the SCAB, and ensure clean air for the region. Projected attainment dates for criteria pollutants are presented in Table 6-II-1. To accomplish its task, the AQMP relied on a multilevel partnership of governmental agencies at the federal, state, regional, and local level. These agencies (i.e. the EPA, CARB, local governments, SCAG, and SCAQMD) are the cornerstones that implement the 1994 AQMP and previous AQMP programs.

TABLE 6-II-1
PROJECTED ATTAINMENT DATES FOR FEDERAL AND STATE AIR
QUALITY STANDARDS FOR THE SOUTH COAST AIR BASIN

Air Pollutant	State Standard	Federal Standard
Nitrogen Dioxide (NO ₂)	December 31, 1999	December 31,1994
Carbon Monoxide (CO)	2000-2010	December 31, 1999
Ozone (O ₃)	Beyond 2010	December 31, 2009
Particulate Matter (PM10)	Beyond 2010	December 31, 2005

The AQMP is a dynamic document that is generally updated every 3 years. The most recent 1997 AQMP is based on the 1994 Plan and carries forward most of the strategies included therein. However, with recent findings by nationally recognized health experts, the new Plan puts greater emphasis on PM₁₀ particulate matter. In fact, the 1997 AQMP was the first Plan required by federal law to demonstrate attainment of the federal PM₁₀ ambient air quality standards. Because of differences in meteorology and population centers, a separate PM₁₀ Attainment Plan was also submitted to the Coachella Valley in December 1996. The Plan also updates the demonstration of attainment of ozone and carbon monoxide. Because the Plan did not demonstrate full compliance with the federal ozone standards by the mandated deadline, the plan was amended and re-submitted for EPA approval. The amendment included additional short-term stationary source control measures. These additional measures are anticipated to assure compliance with Federal CCA requirements. Additionally, because the Basin came into attainment of the federal nitrogen dioxide standard since the prior AQMP was prepared, the new Plan includes a maintenance program to assure continued compliance.

The 1997 AQMP addresses several State and Federal planning requirements and incorporates new scientific data, primarily in the form of updated emissions inventories, ambient measurements, and new air quality models. Expanding on the control strategies included in the 1994 AQMP, the 1997 Plan projects sufficient emissions reductions to meet all federal criteria pollutant standards within the time frames allowed under the Federal CAA.

The 1997 AQMP also addresses notable regulatory rules promulgated since the preparation of the 1994 Plan. These include the implementation of Phase II reformulated fuels in 1996, the replacement of Regulation XV rideshare program with an equivalent emission reduction program, and new incentive programs for generating emissions credits. The 1997 Plan has been accepted by the EPA and now serves as the current AQMP. Other highlights of the 1997 Plan are noted below:

- Use of the most current air quality information, including special particulate matter data from the PM₁₀ Technical Enhancement Program;
- Improved emissions inventories; especially for motor vehicles, fugitive dust, and ammonia sources;
- A similar, but fine tuned overall control strategy with continued emphasis on flexible, alternative approaches including intercredit trading;
- A determination that certain control measures contained in the 1994
 AQMP are infeasible, most notably the future indirect source measures;
- Enhanced modeling for particulates;
- Separate analyses for the desert portions within the District's jurisdiction: the Coachella Valley within the newly designated Salton Sea Air Basin; and the Antelope Valley within the Mojave Desert Air Basin;
- Attainment to the federal Post-1996 Rate-of-Progress Plan and the Federal Attainment Plans for ozone and carbon monoxide;
- A Maintenance Plan for nitrogen dioxide; and
- An attainment demonstration and State Implementation Plan Revision for PM₁₀

Air Pollution Constituents

Both the State of California and the Federal government have established health based Ambient Air Quality Standards (AAQS) for six air pollutants. As shown in

Table 6-II-2, these pollutants include ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulate matter (PM_{10}), and lead. In addition, the State has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particulates. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

In addition to primary and secondary ambient air quality standards, the State of California has established a set of episode criteria for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter. These criteria refer to episode levels representing periods of short-term exposure to air pollutants that actually threaten public health. Health effects are progressively more severe as pollutant levels increase form Stage One to Stage Three.

TABLE 6-II-2 AMBIENT AIR QUALITY STANDARDS

	Averaging	California Standards ¹		Federal Standards ²			
Pollutant	Time	Concentration ³	Method	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone	1 Hour 8 Hour	0.09 ppm (180 µg/m³) 	Ultraviolet Photometry	0.12 ppm ⁸ (235 µg/m ³) 0.08 ppm	Same as Primary Standard.	Ethylene Chemiluminescence	
Carbon Monoxide	1 Hour 8 Hour	9.0 ppm (10 mg/m³) >20 ppm (23 mg/m³)	Nondispersive Infrared Spectroscopy (NDIR)	(157 µg/m³) 9 ppm (10 mg/m³) 35 ppm (40 mg/m³)	None	Nondispersive Infrared Spectroscopy (NDIR)	
Nitrogen Dioxide	Annual Arithmetic Mean 1 Hour	 0.25 ppm (470 μg/m³)	Gas Phase Chemiluminescence	>0.053ppm (100 µg/m³)	Same as Primary Standard.	Gas Phase Chemiluminescence	
Sulfur Dioxide	Annual Arithmetic Mean 24 Hour	 0.04 ppm		0.030 ppm (80 µg/m³)			
	3 Hour	(105 μg/m³) 	Fluorescence	(365 µg/m³) 	0.5 ppm (1300 µg/m³)	Pararosaniline	
	1 Hour	0.25 ppm (655 μg/m³)					
Respirable Particulate	Annual Geometric Mean	30 μg/m ³	Size Selective Inlet High Volume		Same as	Inertial Separation	
Matter (PM10)	24 Hour	>50 µg/m³	Sampler and Gravimetric Analysis	150 µg/m ³	Primary Standards	and Gravimetric Analysis	
(ie)	Annual Arithmetic Mean		,	50 μg/m³		,	
Respirable Particulate Matter (PM10)	24 Hour Annual Arithmetic Mean	No Separate State Standard		65 μg/m³ 15 μg/m³	Same as Primary Standards	Inertial Separation and Gravimetric Analysis	

¹California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter (PM10), are values that are not to be exceeded.

National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when 99% of the daily concentrations, averaged over three years, are equal to or less than the standard. For PM2.5, the 24-hour standard is attained when 98% of the daily concentrations, averaged over three years, are equal to or less than the standard.

³Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C, and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

⁴Any equivalent procedure which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

⁵National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.

⁶National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

⁷Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
⁸New federal 8-hour ozone and fine particulate matter standards were promulgated by the U.S. EPA on July 18, 1997. The federal 1-hour standard continues to apply in areas that violated the standard.

- Ozone O₃ is one of a number of substances called photochemical oxidants that are formed when reactive organic gases (ROG) and nitrogen oxides (NO_x), both byproducts of the internal combustion engine, react in the presence of ultraviolet sunlight. O₃ is present in relatively high concentrations in the SCAB, and the damaging effects of photochemical smog are generally related to the concentrations of ozone. O₃ may pose its worst health threat to those who already suffer from respiratory diseases. This health problem is particularly acute in sensitive receptors such as the sick, the elderly, and young children. Ozone levels peak during the summer and early fall months.
- <u>Carbon Monoxide</u> CO is a colorless, odorless, toxic gas, which is produced by incomplete combustion of carbonous substances (e.g. gasoline or diesel fuel). The primary adverse health affect associated with CO is the interference of normal oxygen transfer to the blood, which may result in tissue oxygen deprivation.
- <u>Fine Particulate Matter</u> PM₁₀ consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists with an aerodynamic diameter of 10 microns (10⁻⁶ meters, or 0.0004 inches) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on nonlandscaped areas also contributes significantly to the local PM₁₀ loading. PM₁₀ may adversely affect the human respiratory system, especially in those people who are naturally sensitive or susceptible to breathing problems.
- No2 produced by combustion is nitric oxide (NO), but NO reacts quickly in the atmosphere to form NO2. NO2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO2 is only potentially irritating. There is some indication of a relationship between NO2 and chronic pulmonary fibrosis. Some increase in bronchitis in young children has also been observed at concentrations below 0.3 parts per million (ppm). NO2 absorbs blue light; the result of which is a brownish-red cast to the atmosphere and reduced visibility. NO2 also contributes to the formation of PM10.
- <u>Sulfur Dioxide</u> SO₂ is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. Fuel combustion is the primary source of SO₂. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. At lower concentrations, and when combined with particulates, SO₂ may do great harm by injuring the lung tissue.
- <u>Lead</u> Pb in the atmosphere occurs as particulate matter. In the past, the combustion of leaded gasoline was the primary source of lead emissions

in the SCAB. Other sources of lead include the manufacturing of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters. With the phase-out of leaded gasoline, secondary lead smelters and battery recycling and manufacturing facilities are becoming lead emission sources of greater concern. Prolonged exposure to atmospheric lead poses a serious threat to human health.

Reactive Organic Gases ROG's are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by ROG, but rather by reactions of ROG to form secondary air pollutants including ozone. Note that for the purposes of this analysis ROG, reactive organic compounds (ROC), volatile organic compounds (VOC), and non-methane hydrocarbons (NMHC) are used synonymously.

<u>Fugitive Dust</u> Fugitive dust poses primarily two public health and safety concerns. The first concern is that of respiratory problems attributable to the suspended particulates in the air. The second concern is that of motor vehicle accidents caused by reduced visibility during severe wind conditions. Fugitive dust may also cause significant property damage during strong windstorms by acting as an abrasive material agent (much like sandblasting activities).

Construction Phase – Thresholds of Significance

The following significance thresholds for air quality have been established by the SCAQMD on a daily basis for construction emissions:

- (2) 75 pounds per day for ROC
- (3) 100 pounds per day for NO_x
- (4) 550 pounds per day for CO
- (5) 150 pounds per day for PM_{10}
- (6) 150 pounds per day for SO_x

The following significance thresholds for air quality have been established by the SCAQMD on a quarterly basis for construction emissions:

- (1) 2.5 tons per quarter for ROC
- (2) 2.5 tons per quarter for NO_x

- (3) 24.75 tons per quarter for CO
- (4) 6.75 tons per quarter for PM₁₀
- (5) 6.75 tons per quarter for SO_x

During construction, if any of the identified daily or quarterly air pollutant thresholds are exceeded by the proposed project, then the proposed project's air quality impacts should be considered significant.

Operational Phase – Thresholds of Significance (Primary Effects)

Specific criteria air pollutants have been identified by the SCAQMD as pollutants of special regional concern. Based upon this categorization, the following significance thresholds for operational emissions have been established by the SCAQMD for project operations:

- (1) 55 pounds per day for ROC
- (2) 55 pounds per day for NO_x
- (3) 550 pounds per day for CO
- (4) 150 pounds per day for PM_{10}
- (5) 150 pounds per day for SO_x
- (6) California State 1-hour or 8-hour CO standards

Anticipated Impacts

This section examines the air quality impacts that would occur from construction activities and operational activities (mobile and stationary sources) if the project is approved, utilizing methodologies and air quality standards established by the State and the SCAQMD. In addition, potential micro-scale air quality impacts from the generation of increased CO emissions at area intersections and consistency of the proposed project with the South Coast Air Quality Management Plan are evaluated. In general, the project would result in increased air pollutant emissions, as would any kind of increased development intensity.

CONSTRUCTION RELATED AIR QUALITY IMPACTS

Impact Analysis

The project encompasses an area of approximately 20 acres. Due to the existing topography and past activities conducted on the site, the removal of debris, existing improvements, and contaminated soil, as well as the import of fill material, will be required as part of the construction effort.

Site construction would involve the use of heavy equipment, creating exhaust pollutants from on-site earth movement and from vehicles removing debris and bringing fill and other building materials to the site. A small amount of emissions are also associated with worker travel both to and from the construction site. With regards to nuisance odors (e.g. diesel fumes), any air quality impacts will be confined to the immediate vicinity of the equipment itself. By the time such emissions reach any sensitive receptor sites away from the project site, they will be diluted to well below any level of air quality concern. Diesel exhaust odors from trucks accessing the site from public roadways may be periodically experienced in immediately surrounding areas. Such brief exhaust odors are considered an adverse, but not significant, air quality impact. associated with site remediation (such as petroleum products) would likely remain on-site or would be diluted by distance and air mixing to the point where they would not be offensive to adjacent off-site residents. During the remediation process, the adjacent residential areas will be continually monitored by the remediation contractor with mobile monitoring equipment.

Temporary impacts will result from project construction activities within the immediate areas proposed for development. Grading and construction activities will consume diesel fuel and thus produce combustion by-products. Construction emissions are based on an equipment listing provided in the calculations contained in the appendix.

Construction is extremely variable in time and space, and daily emissions can only be approximated. City regulations would, however, control hours of operation for all construction (See Section 6 relating to noise). (The included analysis assumes that construction occurs over a period of approximately one year(June 2004 – June 2005) Because the SCAQMD bases its criteria on the maximum daily and quarterly emissions, and grading tends to use the largest and highest polluting equipment, this analysis focuses on grading and site preparation emissions. The subsequent construction of structures, while labor intensive, tends to use smaller types of equipment as well as hand tools. On the other hand, ROG emissions released in painting and coating operations are of a magnitude that, while they probably would not overlap heavy equipment emissions, the analysis would be remiss if they were not disclosed.

The analysis assumes year June 2004 – June 2005 emissions for worker commutes and truck hauls for the duration of the construction period. The proposed project would not be fully constructed in the year June 2004 – June 2005, but this timeframe is used to estimate 'worst case' conditions. SCAQMD requirements will result in lower emissions rates in subsequent future years. Emissions methodology and calculations are presented in Appendix F. The results of the analysis are shown in Tables 6-II-3 and 6-II-4. Note that NO_x , ROG (mainly from the application of paints and coatings), and PM_{10} would exceed their respective daily and quarterly threshold levels, producing a significant impact.

Another aspect of construction has to do with PM₁₀ that is contained in the fugitive dust that is raised as a result of grading activities and transport over unpaved surfaces. PM₁₀ emissions associated with this fugitive dust were calculated using methodology included in the URBEMIS7G model. For the purposes of this analysis, the unmitigated value predicted in the URBEMIS7G model was reduced by 50% to account for compliance with SCAQMD Rule 403. Adherence to this rule is mandatory and under CEQA, adherence to established rules and regulation does not denote mitigation. Based on the included analysis, even with Rule 403 compliance, when PM₁₀ from all sources is considered, both daily and quarterly thresholds are projected to be exceeded, resulting in a potentially significant impact that will require mitigation to reduce this impact to the extent reasonably feasible. Note that of itself, the PM₁₀ included in the fugitive dust would not exceed these criteria values. However, because the PM₁₀ included mitigation measures center on fugitive dust reduction methods.

TABLE 6-II-3 ESTIMATED DAILY CONSTRUCTION EMISSIONS (POUNDS PER DAY)
YEAR 2004 (June 2004- December 2005) EMISSIONS^{1,2}

Source	CO	NOx	ROG	SOx	PM10 ³
Demolition Emissions	337.36	330.9	43.88	0.02	16.14
Site Grading Emissions	353.81	452.52	52.33	0.01	371.0
Building Construction	154.23	138.57	19.67	0.00	6.7
Maximum lbs./day – all phases	353.81	452.52	52.33	0.02	371.0
SCAQMD Threshold	550	100	75	150	150
Exceeds Threshold?	No	Yes	No	No	Yes
Total Quarterly Emissions (Tons) ⁴	8.52	8.64	1.15	0.0	5.35
SCAQMD Threshold (Tons) ⁴	12.38	1.25	1.25	6.75	3.38
Exceeds Threshold?	No	Yes	No	No	Yes

¹ Based on approximately 520,000 square-feet of total construction.
² Unmitigated estimates. Does not include up to 50% PM10 reduction for standard dust control measures required under SCAQMD Rule 403.
³ Total of all PM10 sources, including fugitive dust emissions and construction equipment exhaust emissions.
⁴ Quarterly emissions adjusted for partial year.

TABLE 6-II-4 ESTIMATED DAILY CONSTRUCTION EMISSIONS (POUNDS PER DAY)
YEAR 2005 (January 2005 - June 2005) EMISSIONS¹

Source	СО	NOx	ROG	SOx	PM10 ²
Demolition Emissions	0	0	0	0	0
Site Grading Emissions	0	0	0	0	0
Building Construction	240.99	209.12	907.27 ³	0.16	9.68
Maximum lbs./day – all phases	240.99	209.12	907.27 ³	0.16	9.68
SCAQMD Threshold	550	100	75	150	150
Exceeds Threshold?	No	Yes	Yes	No	No
Total Quarterly Emissions (Tons) ⁴	3.92	3.25	5.31	0.0	2.06
SCAQMD Threshold (Tons) ⁴	12.38	1.25	1.25	6.75	3.38
Exceeds Threshold?	No	Yes	Yes	No	No

Based on approximately 520,000 square-feet of total construction.
 Total of all PM10 sources, including fugitive dust emissions and construction equipment exhaust emissions.
 Includes 874.55 lbs./day from 'off-gassing' during the period that architectural coatings are applied.
 Quarterly emissions adjusted for partial year.

Another area of concern relates to the nature of materials that may be contained within fugitive dust created during construction activities. The project site was formerly used in conjunction with petroleum production, and there is evidence of petroleum residues and other contamination on site.

Although most dust created through construction is inert, petroleum and other residue may be unearthed during remedial grading operations. These residues act as binders to trap fine soil particles that might otherwise escape into the air during handling. These larger particles then settle out of the air much more rapidly than non-agglomerated particles. The potential for remediation and construction to release hazardous materials into the environment is considered a potentially significant impact.

Implementation of mitigation measures can reduce the potential impacts for PM_{10} and hazardous materials to less than significant levels. Mitigation applied towards the use of heavy equipment is estimated to result in a reduction of about 5% for all pollutant types associated with exhaust emissions. All other emissions would be reduced to the extent reasonably feasible. However, NO_{x} emissions associated with the use of construction equipment and vehicles, as well as ROG's from the application of surface coatings, would be expected to remain significant, at least through the remedial grading phase of project construction and when painting operations occur.

With respect to paints and coatings, the use of low VOC coatings is estimated to reduce these emissions by about 5%. The use of HVLP and hand application are associated with transfer efficiencies of 65% and 100% respectively (as opposed to approximately 25% for air atomized spray) and these emissions are further reduced accordingly. The impact, however, is anticipated to remain significant.

OPERATIONAL AIR QUALITY IMPACTS

Impact Analysis

Following the completion of construction, most air emissions would be produced by vehicles traveling to and from the project site. Additionally, on-site emissions would be produced from the use of gasoline for landscape maintenance and the off-site generation of electricity for on-site use.

Mobile Source Emissions

The emissions generated by project-related automobiles and trucks were calculated using the URBEMIS 2002 computer model distributed by SCAQMD. The included analysis is based on a worst-case scenario in that it assumes full project build-out by June 2005. In actuality, the project would likely be

developed over time, and full build-out would not be expected to occur by June 2005. However, as later years show fewer emissions due to reduced vehicle emissions associated with increased restrictions in automobile exhaust standards and the removal of older, higher polluting vehicles from the roads, the use of a June 2005 build-out provides a worst-case scenario.

Stationary Source Emissions

Stationary sources include emissions such as those produced by the use of gasoline powered landscape maintenance equipment, as well as emissions produced off-site at the electrical generating facility associated with the electrical consumption requirements of the project. Emissions for the use of gasoline, electricity, and landscape maintenance were predicted using the URBEMIS 2002 model. Calculations are included in the Appendix.

PROJECT CONSISTENCY WITH AQMP

Impact Analysis

A project is also potentially significant if it is not consistent with the AQMP. A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the AQMP. If fulfills the CEQA goal of fully informing local agency decision makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. Additionally, it provides the local agency with ongoing information assuring local decision makers that they are making real contributions to clean air goals contained in the AQMP.

There are two key indicators of consistency with the AQMP. The first is whether the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations. As demonstrated in the calculations using the Urbemis 2002 computer model, the project operation does not add measurably to any significant CO impacts and therefore does not add to any violations of the air quality standards.

The second indicator is whether or not the project would exceed the assumptions in the AQMP in 2010 or phased increments based on the year of project build out. While the project is anticipated to result in significant air quality impacts during site construction, these emissions are short-term. The project also does not produce significant long-term emissions as described in preceding sections. As such, the project is considered to be consistent with the overall goals of the AQMP and, in this respect, does not present a significant impact.

M-4 Operational Impacts, with respect to both mobile and stationary air emission sources, are not estimated to exceed SCAQMD air quality significance thresholds. Operational emissions have been calculated for both mobile and stationary sources using the URBEMIS 2002 model and the following are the results of those calculations (in lbs./day – unmitigated):

	ROG	NO _x	CO	SO ₂	PM10
Total Emissions	<mark>24.35</mark>	<mark>26.42</mark>	237.77	0.24	<mark>19.67</mark>
SCAQMD Thresholds	<mark>55</mark>	<mark>55</mark>	<mark>550</mark>	<mark>150</mark>	<mark>150</mark>
Exceeds Thresholds?	NO	NO	NO	NO	NO

Mitigation Measures

The provided analysis indicates that NO_x , ROG, and PM_{10} emissions are projected to exceed SCAQMD's daily and quarterly threshold criteria and mitigation is warranted to reduce these emissions to the extent reasonably feasible. As such, the following measures shall be implemented:

- II-1 Prior to the issuance of any grading permits, the Applicant shall prepare a Fugitive Dust Emission Control Plan in compliance with SCAQMD Rule 403. The plan shall identify methods to control fugitive dust through implementation of reasonable available control measures in sufficient frequencies and quantities to prevent visible emissions from crossing the property lines of the proposed facility. Provisions of the plan shall include the stipulation that all areas of active grading shall be watered at least twice daily and that not more than 10 acres will undergo active grading at any one time. The plan shall also stipulate that disturbed areas at the construction site shall be treated with dust suppressants when activities have ceased for 30 days, as well as two or more of the control techniques identified below:
 - 1. Application of non-toxic chemical stabilizers to unpaved roads and vehicle parking areas;
 - 2. Application of sufficient water prior to initiating any earth movement;
 - 3. Sweeping and/or cleaning streets where vehicles exit construction sites;
 - 4. Installation of wheel washers where vehicles exit disturbed surface areas onto paved roads;
 - 5. Paving of construction access roads;
 - 6. Paving of all roads on a construction site once final elevations have been reached or at the earliest feasible time;
 - All stockpiles for material export shall be watered at least twice daily. Stockpiles that may be used for long-term on-site soil storage shall be planted and watered twice daily until such plants take root;
 - 8. Any other measures as approved by the Planning Department.

- II-2 All heavy equipment shall be maintained in a proper state of tune as per the manufacturer's specifications.
- II-3 Heavy equipment shall not be allowed to remain idling for more than five minutes duration.
- II-4 Trucks shall not be allowed to remain idling for more than two minutes duration.
- II-5 Electric power shall be used to the exclusion of gasoline or diesel generators whenever feasible.
- II-6 The applicant shall specify that the contractor use only paints and coatings low in Reactive Organic Gas (ROG) content in order to minimize such emissions and vapors.
- II-7 All paints and coatings shall be applied either using high volume, low pressure (HVLP) spray equipment or by hand application in order to minimize dispersion of vapors and spray.
- II-8 All known and observed hazardous materials will be remediated in accordance with the recommendations included in Section VI. Hazards of this document. If locations where contamination from prior activities or hazardous materials are discovered during construction activities, these construction activities shall be curtailed until the area is evaluated and remediated as determined appropriate by all regulatory agencies. Removal of petroleum contamination will also alleviate the generation of hydrogen sulfide and its attendant odor. These activities would fall under the direction of any local, regional, and state agencies that would 'sign off' on the remediation effort upon completion.

Cumulative Impacts

With most development, the greatest source of emissions is from mobile sources, which travel well beyond the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and when wind patterns are considered, would cover an even larger area.

In accordance with SCAQMD methodology, any project that results in significant daily impacts that cannot be mitigated to less than significant levels adds to the cumulative impact. Thus, site construction activity, which is expected to result in significant unmitigable NO_x , PM_{10} , and ROG emissions, also adds to the cumulative air quality impact. However, even after mitigation, impacts from NO_x , PM_{10} , and ROGs would exceed acceptable thresholds and remain significant during the construction phases of the project. In consideration of the preceding

factors, that project has a significant cumulative impact with respect to short-term air quality impacts for NO_x , PM_{10} , ROGs. There are no anticipated long-term air quality impacts associated with the project operation.

Unavoidable Significant Impacts

As previously indicated, there are significant adverse short-term impacts with respect to air quality associated with the project. NO_x , PM_{10} , and ROG emissions resulting from project construction cannot be mitigated to a level of less than significant or below. Therefore, the City of Long Beach Planning Commission must adopt a Statement of Overriding Considerations for Air Quality impacts prior to project approval.

III. BIOLOGICAL RESOURCES

Existing Setting

Historically, since the project site is located in close proximity to the Los Angeles River, it may at one time have contained arboreal riparian vegetation. Arboreal riparian vegetation was common along the margins of the Los Angeles and San Gabriel Rivers. As the City developed, wildlife habitats were substantially altered or destroyed causing the number and diversity of species to be extremely limited and controlled. The undeveloped areas of the project site may provide open field habitat for common reptile and small mammal species.¹

Currently, the project site contains common ornamental plant materials resulting from prior uses and some species migration to the site. The site presently supports the following variety of species: Eucalyptus SP., Cupressus Leilandii, Cupressus SP., Bougainvillea SP., Fraxinus SP., Schinus Terebinthifolia, Schinus Molle, Nerium Oleander, Ficus SP., Cupaniopsis SP., Washingtonea Robusta, Palm SP., Celtis SP.² All of these species are common in Southern California.

Generally, the existing mature plants are in poor to bad condition due to lack of care, water and soil contamination. There is no evidence of sensitive species of grasses, forbes herbaceous material, wildlife or avifauna on site.

Anticipated Impacts

The proposed project will result in the removal of all existing vegetation. In general, removal of non-native landscaping vegetation is not considered significant due to the existing absence of native flora. Construction activity may result in disturbances to wildlife resulting from increased noise and activity levels in construction areas. Some species with greater mobility may be displaced, while others may be killed or injured by clearing, earth removal and equipment removal. However, none of the wildlife species on the project site are considered to be sensitive species, and thus their loss is not considered significant. Once the site has been landscaped, many of the wildlife species tolerant of human presence will return. Over the long term, the proposed project will provide a beneficial impact by cleaning contaminated soils and providing landscaping for an urban wildlife habitat.

¹ Copeley International Corporation, Botantical Survey and Ecological Habitats of Long Beach, June, 1974.

² City of Long Beach, Initial Study – Gerry Felgemaker, Environmental Officer Site Survey, 2002.

Mitigation Measures

III-1 Drought-resistant plants shall be incorporated in the new landscaping plan.

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

No unavoidable significant impacts are anticipated to biological resources.

IV. CULTURAL RESOURCES

Existing Setting

The project site, which is located between the Los Angeles River and an established residential neighborhood, is not listed in any local register of historical resources. In addition, there are no recorded resources within influence of the project site.

Anticipated Impacts

The proposed project would not be anticipated to cause a substantial adverse change in the significance of any historical, archaeological or paleontological resource. There are also no known human remains at the project site or within the vicinity of the project site that would be disturbed by the proposed project.

However, because the site has not been graded and because it is located adjacent to the LA River there may be archaeological or paleontological artifacts on the site. The following mitigation measures will mitigate this possibility to a level below significance.

Mitigation Measures

- IV.1 Because the site must be graded, there is a potential for the disturbance of archaeological artifacts. If any archaeological artifacts should be found during excavation, work shall cease and a project Archaeologist shall be retained.
- IV.2 If archaeological test excavations performed by the project Archaeologist reveal archaeological resources (sites, features, or artifacts) deemed unique (as defined by the provisions of California Public Resources Code Section 21083.2(g) by the project archaeological, those resources to be disturbed shall be addressed through scientific archaeological salvage excavations subject to the provisions and limitations of California Public Resources Code Section 21083 (c), (d), and (e)(1).

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

None are anticipated.

V. GEOLOGY AND SOILS

Existing Setting

The Long Beach region has a complex geologic history including periods of uplift, subsidence, sea-level transgression and regression, and folding and faulting. The proposed project is located on a generally flat topographical site with a gentle inclination to the west with exception of the northern portion of the site where an approximately 20-foot high fill stockpile exists. A geotechnical investigation of the site was prepared and released in April 2002 by Lawson & Associates. In order to evaluate the general engineering characteristics of the onsite subsurface soils, boring samples were taken on site. In addition, trench samples were taken to evaluate the near surface soils. The subsurface investigation included excavation of four small-diameter borings, to a maximum depth of 51.5 feet below existing ground surface and ten exploratory trenches to depths up to approximately 16 feet. The complete study is included in the Appendices.

The project site is underlain by alluvial soils deposited with the Los Angeles River flood plain. The site has alluvial terrace deposits and undocumented fill soils introduced to the site by previous phases of development. The fill soils are underlain by thick deposits of alluvium. Majority of the site consists of undocumented artificial fill soils. The significant phases of fill placement likely included: (1) cutting and filling of the low and high areas to create a relatively flat site; (2) excavation and berm construction for several detention basins; (3) subsequent infilling of all but two of the detention basins; and (4) stockpiling of soil in the northern portion of the site adjacent to the San Diego (405) Freeway. According to the geotechnical investigation, it is apparent that little to no remedial grading occurred prior to placement of fill soils on the site and that the placement of fill soils was not conducted with engineering observation and testing. addition, it appears that oil production solids, similar to material observed in the active detention basins on site, are still present at the base of the in-filled detention basins.

Subsurface investigation found 38 feet of undocumented fill composed primarily of fine, sandy silt with various amounts of rubble and debris. Generally, the fill soils were found to be loose to medium dense and damp to moist. Petroliferous odors were common within the fill soils, as were debris including concrete rubble, asphalt fragments, and construction debris. The majority of the fill soils found on the project site are considered potentially compressible. Alluvial soils were encountered below the fill soils in the western portion of the site. These soils, which were not observed on the site's surface, generally consisted of fine, sandy silt. The upper portion of the material appeared to be loose to medium dense with abundant to fine pores, and is considered potentially compressible. The third layer of soils found on site are terrace deposits encountered at the surface in the eastern portion of the site and at depth below fill soils and alluvial soils in

the western portion of the site. The deposits consist of fine, sandy silt and fine sand, generally dry to damp, but dense. The upper two feet, however, was found to be porous and potentially compressible. Generally, these soils are considered suitable for additional fill placement, with the exception of the two feet that was considered potentially compressible. The alluvium and terrace material found was generally flat lying and may be cross-bedded locally.

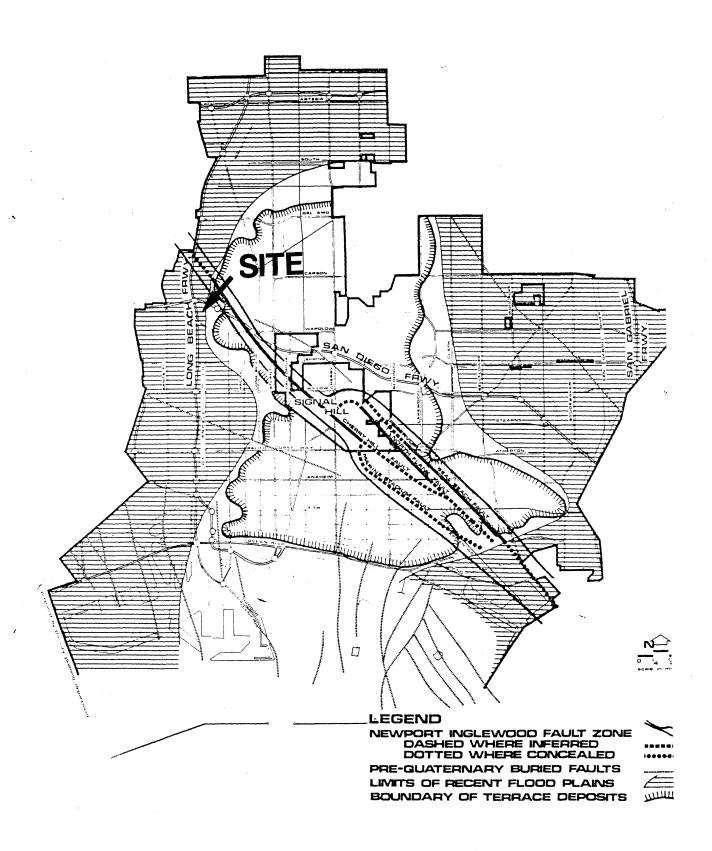
Based on the subsurface investigation by Lawson & Associates and pertinent geologic literature, there is no indication of landslides within the limits of the site.

No faults are known to pass beneath the project site, and the area is not in an Alquist-Priolo Special Studies Zone. The site is, however, located approximately 1,000 feet southwest of the active Newport-Inglewood Fault zone. See Exhibit 6-V-1.

The analysis of the project site for potential liquefaction based on boring tests found that overall adverse effects due to liquefaction are not expected to be significant. Results of the liquefaction analysis are included in the Lawson & Associates Report found in the Appendices.

Anticipated Impacts

Construction of the proposed project will include site preparation and remedial grading followed by construction of a slab-on-grade type foundation, and asphalt paving of the parking area and driveways.



FAULT MAP OF LONG BEACH

SOURCE: CITY OF LONG BEACH, PUBLIC SAFETY ELEMENT.

Exhibit 6-V-1

Prior to the grading of areas to receive structural fill or engineered structures, the project site will be cleared of surface obstructions, existing debris, potentially compressible material and stripped of existing vegetation.

The upper portion of the site which is underlain by potentially compressible soils may settle under the surcharge of fill and/or foundation loads. The compressible soils not removed by the planned grading should be excavated to competent material, and replaced with compacted fill soils. It is anticipated that removals will average approximately 8 to 10 feet below existing grading and up to 15 feet below existing grade in areas at the base of buried detention basins. Based on the geotechnical investigation, the groundwater table ranges between –7.9 to – 9.6 feet below mean sea-level on site, and is not expected to be encountered during grading, however, localized areas of shallow perched groundwater may exist across the site.

Due to the self-weight consolidation of the fill and underlying soils, some amount of settlement will occur during the project design life. Based on the geotechnical study, it is estimated the post-construction settlement of the site to be less than 2 inches with a differential settlement of approximately of 0.5 inches in 20 feet.

In order to limit the potential for slope instabilities during remedial grading, temporary stability of the excavations along the perimeter of the site needs to addressed. If movement sensitive structures (e.g., power poles, roadways foundations, etc.) are located within the zone of influence of any excavation, then the excavation should be shored appropriately. Soils within the top of slope setback area possess poor lateral stability and should be designed to provide support.

It is anticipated that the onsite soils may be excavated with conventional heavyduty construction equipment. Demolition of the existing concrete structures may require breakers (or similar) to reduce the size of the rubble to acceptable dimensions to be placed as fill.

Onsite soils are generally suitable for use as compacted fill, provided the soil is screened for rocks greater than 6 inches in maximum dimension, organic materials and construction debris. Oversized material may be placed in the deeper fill areas on the site. In general, this material should not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction. Any rebar should be removed from concrete prior to burial. The onsite soils may also generally be suitable as trench backfill provided the soil is screened for rocks and other material over 6 inches in diameter and organic matter. If trenches are shallow, the use of conventional equipment may result in damage to the utilities unless clean sand (sand equivalent of 30 or greater) is used to bed and shade the utilities. Laboratory test results on the onsite soils

indicated a low potential for expansion, however, this should be confirmed at the end of grading.

The five large concrete skimmers located on the project site may be left in place and in-filled according to specifications outlined in the Lawson & Associates' study which is included in the Appendices. The site may be suitable for the support of the proposed one-story structures using a conventional or post-tensioned slab-on-grade foundation systems. The geotechnical investigation outlines alternative type of foundation systems, including conventional footings and post-tensioned foundations, lateral earth pressures and retaining wall design considerations. Laboratory test results of the onsite soils indicated a negligible potential for soluble sulfate attack on normal concrete, however, this should be confirmed at the end of grading.

As indicated in Exhibit 6-V-1, the Newport-Inglewood Fault Zone, located approximately 1,000 feet northeast of the site, is considered to have the most significant effect on the site. The main seismic hazard is from ground shaking from this regional fault. The maximum anticipated bedrock acceleration on the site due to a maximum probable earthquake on the Newport-Inglewood Fault Zone is estimated to be 0.56g. A trigger mechanism for liquefaction exists at a depth of 40 to 45 feet below the surface, however, surface manifestation and adverse effects are not expected to be significant.

Based on the findings of the Lawson & Associates' Geotechnical Investigation, as well as their review of past geotechnical and geologic reports, the proposed project is feasible from a geotechnical standpoint, provided the conclusions and recommendations are incorporated into the project plans, specifications, and followed during site grading and construction. This is also assuming that all appropriate site remediation has occurred in accordance with specifications outlined in the hazards and hazardous materials analysis.

Mitigation Measures

All earthwork onsite shall be performed in accordance with the following recommendations, the City of Long Beach Grading Requirements, and the General Earthwork and Grading Specifications for Rough Grading found in the Lawson & Associates' Geotechnical Investigation (LAGI) included in the Appendices.

V.1 During site preparation, the project area shall be cleared of surface obstructions, existing debris, potentially compressible material and stripped of vegetation. Holes resulting from the removal of buried obstructions shall be replaced with suitable compacted fill material. Areas to receive fill and/or other surface improvements shall be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition,

- and recompacted to at least 90 percent relative compaction as per American Standard of Testing and Materials [ASTM] Test Method D1557.
- V.2 Compressible materials not removed by the planned grading shall be excavated to competent material, and replaced with compacted soils. Recommended depth of remedial grading ranges from 8 to 15 feet with some localized deeper removals deemed necessary, such as 15 feet below existing grade at the base of buried detention basins.
- V.3 In order to address stability of excavations along the perimeter of the site, the grading contractor shall not cut any slopes steeper than 1:1 and the remedial grading shall occur in stages with the total length of excavation that allowed open at one time be limited to a maximum of 100 linear feet. All movement sensitive structures located within the zone of influence during excavation shall be appropriately shored.
- V.4 In general, fill shall be placed in uniform lifts not exceeding 8 inches in compacted thickness with placement and compaction of fill in accordance with local grading ordinances under the observation and testing of the geotechnical consultant.
- V.5 In general, oversized material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.
- V.6 Any imported soils, if deemed necessary for fill, shall consist of granular soils of very low to low expansion potential (expansion index 50 or less based on UBC 18-2) and contain no materials over 6 inches in maximum dimension.
- V.7 To prevent any damage to utilities, shallow trenches shall use clean sand (sand equivalent (SE) of 30 or greater) to bed and shade the utilities.
- V.8 If the five concrete skimmers are left in place and in-filled, all machinery, debris, and potentially compressible material shall be removed from the concrete tanks prior to backfill. The bottom of the tanks shall be broken and perforated by 4-inch diameter or larger holes spaced approximately 10 feet apart with a minimum of 15 holes per tank to allow for drainage. The upper portions of the concrete tanks shall be removed within 5 vertical feet of finish grade as a minimum and/or at least 3 vertical feet below the base of the proposed utilities. The tanks shall then be backfilled by mechanical means to at least 90 percent relative compaction.
- V.9 Provisional foundation recommendations, included in the Appendices, shall be implemented depending on foundation type (e.g., conventional footings, post-tensioned foundation, etc.)

- V.10 All foundations shall be setback in accordance with the City of Long Beach Grading Code or the UBC, which ever is more restrictive. Future improvements constructed within the top of slope setback area shall provide a deepened footing or a pier and grade beam foundation to support the improvement with flexibility, or design the improvement to accommodate potential movement.
- V.11 The recommended lateral pressures for approved onsite sand for level or sloping backfill shall be maintained as stated in the LAGI report which is included in the Appendices.
- V.12 Embedded structural walls shall be designed for lateral earth pressures exerted on them. Walls shall be designed for "active", "at-rest" or "passive" conditions as determined by conditions. If conditions other than those arise, the equivalent fluid pressure values shall be provided on an individual case basis by the geotechnical engineer. Refer to the Appendices for wall design considerations.
- V.13 Any surcharge loading effects from adjacent structures on wall structures shall be evaluated by the geotechnical and structural engineers. All retaining wall structures shall be provided with appropriate drainage and waterproofed.
- V.14 Prior to the commencement of earthwork and grading, the applicant shall meet the specifications for rough grading outlined in LAGI.
- V.15 The applicant shall refer to the LAGI's recommendations for pavement, corrosivity to concrete and metal, nonstructural concrete flatwork, surface water and drainage control.
- V.16 During construction, the interpolated subsurface conditions shall be checked in the field by a representative of Lawson & Associates. Also future grading, excavations, backfill of utility trenches, preparation of pavement subgrade and placement of aggregate base, foundation or retaining wall construction or when unusual soil conditions are encountered on site, construction observation and testing shall be performed by the geotechnical consultant.

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

No unavoidable significant impacts are anticipated to geology and soils upon implementation of the mitigation measures.

VI. HAZARDS AND HAZARDOUS MATERIALS

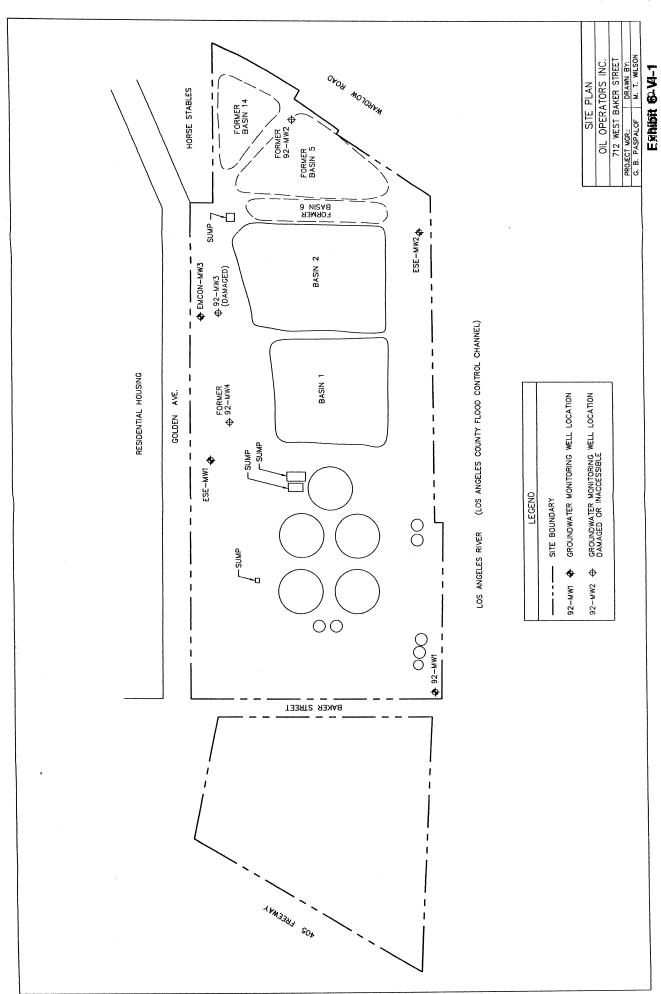
Existing Setting

Oil Operators Inc. owns the subject property and has operated onsite water treatment facilities since 1926 to treat produced water (production brines) and other fluids recovered during oil production. The aforementioned process removed oil and sediment from the water, allowing the treated water to be disposed of offsite. As a by-product of this process, low-grade oil was recovered for recycling.

From 1926 to the mid 1950s, oil production brine was piped into various clay-lined basins, where the water underwent separation and skimming processes to remove oil and sediment prior to disposal of the water. In the mid 1950s, a water treatment plant was constructed onsite consisting of five circular concrete skimming basins and associated pumps, tanks, pipelines and other facilities. The treatment plant was located north of the two large rectangular basins referred to as Basins 1 and 2 (Exhibit 6-VI-1). Basin 1, is a large square settling basin containing an estimated 5,000 cubic yards of residual oily solids that settled out of the oil production brine water processed through the site over the last several decades. Basin 2 received relatively clean water after it had gone through various stages of skimming. In Basin 2 the water was held until it was released to the sanitation district for disposal. Additional smaller basins were historically present south of Basins 1 and 2. These smaller basins were closed in 1986 and 1987.

Oil Operator's members began to utilize two new water treatment facilities located in Signal Hill. Immediately prior to ceasing operation at the subject site in 1998, the Oil Operators facility consisted of the five circular concrete skimming basins, Basins 1 and 2, various aboveground storage tanks and surface buildings. Much of the vacant area of the property was formerly leased to a plant nursery.

The property has been undergoing decommissioning in phases since 1998. The nursery vacated the site in 1999. In 2000, the City of Long Beach ordered all buildings, sheds and similar structures to be demolished with the debris hauled offsite. Special provisions were made for properly handling asbestos-containing materials. In the summer of 2001, the City further ordered the aboveground storage tanks to be emptied of all contents and demolished. Currently, the tanks are no longer present, although the bases or floors of two tanks still remain along with related pipelines.



ANTICIPATED IMPACTS

Environmental Site Assessment

Numerous environmental site assessments have been conducted on the site since the early 1980s. The first study by Emcon in 1981 was conducted to evaluate site conditions relative to future construction plans. Subsequent studies were conducted to evaluate impacts to soil and groundwater from site activities. Exhibit 6-VI-2 details the location of current groundwater wells required by the RWQCB. Oil Operaters, Inc. is required by the RWQCB to monitor these wells semi-annually. Appendix E is a copy of the results from October 2003.

The chemical compounds that have been found onsite are primarily representative of unrefined, crude oil-related, non-hazardous petroleum impacted materials.

Depth to groundwater has ranged from about 35 to 60 feet below ground surface, with a general flow direction to the west. The groundwater flow may be affected by the seasonal presence of water in the Los Angeles River.

Petroleum impacted soil has been found throughout the central portion of the site around the areas of the basins and skimming ponds. The eastern boundary of the site along Golden Avenue historically did not contain water treatment facilities and appears to be relatively un-impacted. An assessment performed by QST in June 1998 indicated that some areas of the former southerly basins (Basins 5 and 14) still contain impacted soil although bioremediation was performed in that area several years ago. Petroleum-impacted soil was found at a depth in excess of 35 feet in the northern portion of the site (north of Baker Street). Based on correlation of boring logs from the various assessments, there appears to be a continuous clay later extending beneath Basins 1 and 2 at mean sea level and another clay layer across much of the property at about 15 feet below mean sea level.

A Phase I Environmental Site Assessment Report was prepared by Miller Brooks Environmental, Inc., for then entire site (Attached as Appendix D). In addition to a visual site inspection, the Report discusses "regulatory agency database and records reviews", done on the site in the past. Exhibit 6-VI-3 indicates that the site is identified by the No Further Remedial Action Planned (Cercils sites, (NFRAP)), the California State Wide Environmental Evaluation and Planning System (SWEEPS), and Leaking Underground Storage Tank List (LUST) databases.

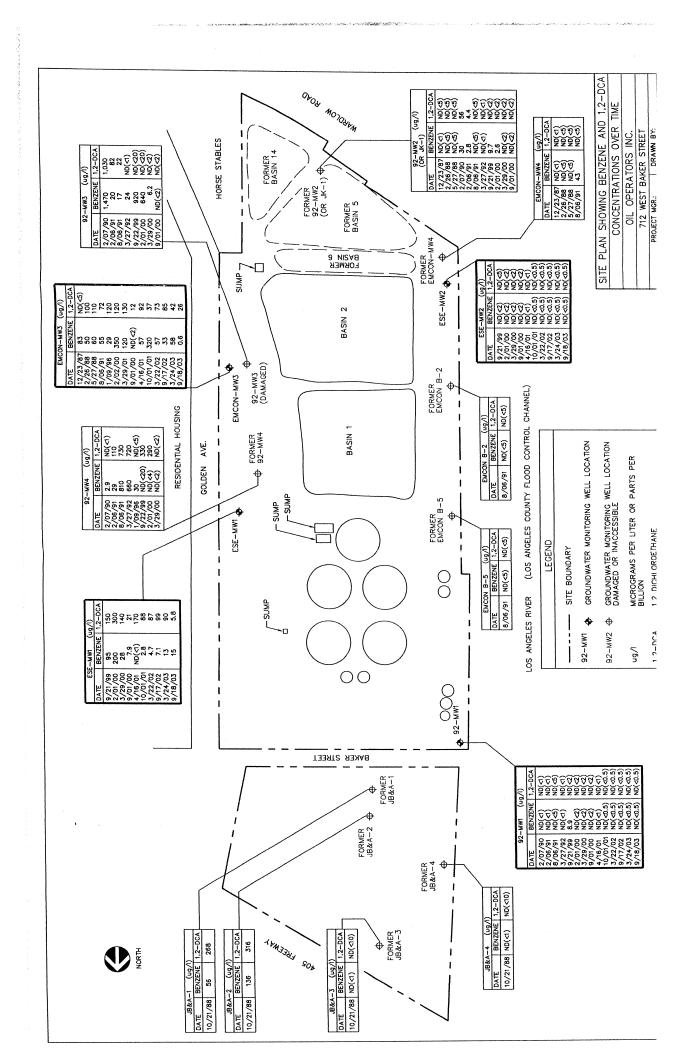


Exhibit 6-VI-3

REGULATORY AGENCY LIST SEARCH SUMMARY 712 West Baker Street Long Beach, California

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Treatment, Storage, and Disposal Facilities	I Facilities						Planning System	System						
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Corrective Action of Treatment, Storage, and Disposal Facilities	torage, and	d Disposal Fa	cilities			·	SWAT = Solid Waste Assessment Test Sites List	id Waste A	ssessment	Test Sites Li	i i			
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<u>Comprehensive Environmental Response, Compensation, and Liability Act -</u> CERCILS

CERCILS established a federal program to identify sites where hazardous substances have been, or could be released into the environment; and ensuring that they are cleaned up by responsible parties or the government.

The site is not identified by the Federal Environmental Protection Agency (EPA) as a potential Superfund site. Because it is listed on the NFRAP list, the EPA has determined that it is not a Superfund site and the site requires no further action at the Federal level.

<u>California State Wide Environmental Evaluation and Planning System – SWEEPS</u>

The SWEEPS database, dated 1994, listed the subject site as having five 365,000-gallon concrete underground tanks registered at the site. Exhibit 6-VI-4 indicates these tanks as five large circles. These facilities were used as cement lined underground sediment tanks. These structures must be removed, as part of the site remediation.

Leaking Underground Storage Tank List – LUST

The California Regional Water Quality Control Board (RWQCB), Los Angeles Region, maintains a list of leaking underground storage tanks. The proposed site was recorded on this list as having leaking tanks, for petroleum hydrocarbon release to soil only. This reference referrers to possible leaking of the sediment tanks into the surrounding soil and not into the ground water.

In addition, Exhibit 6-VI-3 determined that there were no other contaminated sites within 2,000 feet of the proposed project site, ensuring that the proposed project does not fall within a "Border Zone of Contaminated Property".

<u>Department of Toxic Substances Control – DTSC</u>

The DTSC submitted comments during the Notice of Preparation Comment Period. This document has addressed all comments made by this agency. In a follow-up letter from the DTSC to Mr. Jeff Benedict, the City's Hazardous Waste Operations Officer, the DTSC stated that this project was not under their purview, because it involves petroleum contamination. (see Exhibit 6-VI-4)

Basin 1

A remedial action plan was prepared and forwarded to the California Regional Water Quality Control Board- Los Angeles Region (LA-CRWQCB) for soil at the site in 1998. This plan was approved, subject to certain conditions, in a letter



Department of Toxic Substances Control

Edwin F. Lowry, Director 5796 Corporate Avenue Cypress, California 90630

Gray Davis Governor

Winston H. Hickox Agency Secretary California Environmental Protection Agency

October 1, 2002

Mr. Jeff Benedict Hazardous Waste Operations Officer City of Long Beach Department of Health and Human Services 2525 Grand Avenue Long Beach, California 90815

Dear Mr. Benedict:

Thank you for your recent letter regarding the Oil Operators Property (Site) located in the City of Long Beach. In your letter you requested assistance from the Department of Toxic Substances Control (DTSC) in overseeing cleanup of crude oil sludge at the Site.

As I mentioned in our telephone call, DTSC Southern California Cleanup Operations Branch regulates the release of hazardous substances in accordance with California Health and Safety Code, Chapter 6.8. You also indicated in your letter that the property was the site of various petroleum-related activities with settling ponds, sumps and a crude oil sludge basin. Petroleum, including crude oil or any fraction thereof is excluded from the definition of hazardous substances pursuant to Heath and Safety Code, section 25317. Therefore, while we appreciate your request and would like to assist the City, we do not get involved in sites that involve exclusively petroleum contamination. We encourage you to work with the Los Angeles Regional Water Quality Control Board, which has the regulatory authority and expertise in cleaning up petroleum release sites.

If you have any questions, please contact Mr. Greg Holmes at (714) 484-5461 or me at (714) 484-5459.

Sincerely,

Thomas M. Cota, Chief

Southern California Cleanup Operations Branch - Cypress Office

cc: See next page

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sent by the LA-CRWQCB dated April 1999. The plan contained protocol for excavating onsite soil and bioremediating it through the use of land farming techniques in one or more treatment cells. The remedial action plan did not contain provisions for removal of oily materials from Basin 1. Such provisions were contained in the September 28, 2001 Pilot Test Work Plan submitted to and approved by the City.

In October 2000, a representative from the Long Beach Department of Health and Human Services (LBDHHS) collected samples of the oily material from Basin 1. The samples were analyzed by Advanced Technology Laboratories in Signal Hill, California. As expected, total petroleum hydrocarbons were detected at fairly high concentrations. However, no volatile organic compounds were detected using EPA Method 8260. This is consistent with unrefined crude oil chemistry and further supports the assertion that Basin 1 contents are non-hazardous

In October 2002, the LBDHHS requested that Oil Operators conduct further sampling of Basin 1. Grid sampling was requested, with samples taken from several depths within each grid. Brycon, LLC conducted the sampling for Oil Operators. The results did not reveal any unanticipated information regarding the nature of the oily solids. The results confirmed previous assertions regarding the nature of these materials; namely, that they are consistent with crude oil chemistry as opposed to refined petroleum products, solvents or other chemicals. The findings are consistent with the use of the property as a treatment facility for water generated during crude oil production. The City's review of the Basin 1 sampling emphasized that the sediment in the area of the inlet pipe to Basin 1 is of concern. The sediment was found to contain somewhat elevated levels of the metals arsenic, chromium, lead and nickel. The levels were not excessively high, however, they did exceed 10 times the soluble threshold limit concentration (STLC), which is a criterion for performing a solubility analysis. The solubility analysis was performed and indicated that the solubility levels of these metals did not exceed their respective STLC values, which would have indicated that the soil exhibits the characteristic of toxicity.

The Basin 1 remediation plan has been approved by LBDHHS and contains the following five components: 1) water removal and subsequent disposal; 2) solidification of oil/solid materials by addition of soil; 3) removal and transport of solidified material to a holding cell; 4) processing of solids to produce a homogenous blend in order to encourage and facilitate natural bioremediation; and 5) segregation, characterization and offsite disposal of heavy-metals-impacted sediment/clay at the bottom of Basin 1.

The area around the Basin 1 inlet contains a very thick accumulation of sediment. Sediment also occurs at the bottom of the basin. Because somewhat elevated concentrations of arsenic, chromium, lead and nickel were previously found in this sediment, the sediment will undergo special handling procedures.

The procedures include careful excavation of this material to prevent mixing with other soil or solids, placement of the excavated material into an isolated stockpile for chemical profiling and determining the fate of the material based on the outcome of the chemical profiling. Soil containing heavy metal impacted soil in excess of remediation goals as specified in this plan will require off-site disposal at a disposal facility equipped to accommodate soil, containing metal.

The proposed remedial method for remediation of hydrocarbons is bioremediation. In bioremediation, soil is typically placed into a treatment area until it reaches a height of several feet. Once the treatment area has reached the desired height, the upper 18 inches of soil will be treated until it has met the cleanup criteria. This upper lift will then be removed from the treatment area and stockpiled or backfilled into the excavations, and treatment of the next underlying lift will begin. This pattern of successive treatment of lifts will continue until all of the excavated soil is treated.

A question was raised by a community member, regarding the potential for the bioremediation method to release harmful bacterial into the air. It is not anticipated that this will occur, because environmental remediation experts in the field have noted that this is not a condition that is caused by bioremediation. However, mitigation measure VI-5 will ensure that there are no significant contaminates released into the air.

Volitive air emissions are not anticipated to be significant during site construction operations. However, perimeter air monitoring, consisting of collecting permiter air readings with a handheld flame ionizing detector will occur when site remediation is happening.

Based on the Phase 1 report done in 1998, the remainder of the site will require further remediation. This process will be based on the standards provided by the RWQCB Guidelines, dated May 1996.

Mitigation Measures

- VI.1 Prior to the release of Grading Permits, Remediation of Basin 1 must be complete and LBDHHS must issue a letter of "No Further Action".
- VI.2 Prior to the release of Grading Permits, the entire site must be remediated to the standards provided by the RWQCB.
- VI.3 All heavy metal contaminated soil must be transported from the site and disposed of by best management practices established by the South Coast Air Quality Management Board and the Department of Transportation.

- VI.4 The applicant must submit an odor and vapor suppression program to the satisfaction of LBDHHS and the SCAQMD.
- VI.5 The applicant is required to provide an on-site monitor to perform monitoring and /or soil and air sampling during grading, trenching, and cut or fill operation, and the monitor shall be allowed inspection of developer's monitoring and testing under the direction of the City of Long Beach to ensure that surface soil conditions, conditions of exposed soils, and air conditions are safe for residents and on-site workers.
- VI.6 Groundwater monitoring must continue as required by the RWQCB.

Cumulative Impacts

Adverse impacts are not anticipated; the project will not be allowed until the site has been remediated according to respective regulatory agencies and will not significantly affect the adjacent land uses. None of the listed cumulative projects will require simultaneous remediation.

Unavoidable Adverse Impacts

Prior to issuance of building permits, contaminated soils will have been removed or remediated according to respective regulatory agencies. Therefore, under CEQA based thresholds of significance, no unavoidable adverse impact to public health and safety are anticipated.

VII. HYDROLOGY AND WATER QUALITY

Existing Setting

The project site is bordered by the Los Angeles River to the west, the San Diego Freeway (I-405) to the north, single-family residential to the east and Wardlow Road to the south. The site consists of approximately 20 acres of land that was formerly used to store and separate brine water and other fluids from oil pumped at wells in Long Beach and Signal Hill. The site includes basins where the water and other fluids have been stored before and after treatment. The site has functioned as a place to store byproducts of oil production. The site has not functioned as a source of oil production.

Groundwater beneath the site occurs at depths ranging from about 35 feet near the western boundary of the site to 60 feet along the eastern boundary of the site. Although all groundwater beneath the site is categorized as being "of beneficial use" by the Regional Water Quality Control Board, the shallower aquifers are not commonly used as water sources due to regional degradation from sea water intrusion and industrial pollutants.

The nearest water main runs north to south under Golden Avenue directly east of the site. Per the City of Long Beach Water Department, the existing water infrastructure is adequate to serve the proposed project. A Los Angeles County sewer main (30" diameter) runs roughly north to south underneath the project site. Located in the eastern half of the site, this utility would be an outstanding issue for any proposed development on the site (discussed in the Utilities Section).

Anticipated Impacts

The proposed project, a self-storage facility, would be constructed in four phases. Because the project site is largely unpaved with all drainage taking place onsite into the earth, gradual development of the proposed project would result in the site evolving into an impervious surface covered by structures and hardscape. Therefore, the project would substantially alter the existing drainage pattern of the site.

The project site is at a lower elevation than the surrounding rights-of-way (I-405 and Wardlow Road) and the surrounding land uses. As a result, the anticipated impacts of the proposed project would be expected to be less than if the project site was at a higher elevation and had the potential to drain off-site in all directions.

Any drainage plan for the project site must address drainage during site preparation (remediation and clean up), during grading and construction, and

during operation of the self storage facility. An adequate plan would prevent the proposed project from violating any water quality standards or waste discharge requirements. With appropriate mitigation, the proposed project would not be expected to contribute runoff water that would exceed the capacity of the existing storm water drainage system or create an additional source of polluted runoff.

Any proposed development would be required to address the existing Los Angeles County sewer main that travels under the project site. Issues to consider would include the condition of the existing sewer main, the ability to have continuous access to the sewer main, the status of the easement over the sewer main and how the sewer main would affect drainage and structure location on the project site.

Mitigation Measures

The applicant shall be required to comply with the following mitigation measures:

- VII.1 Prior to the release of the grading permit, the applicant shall submit a final hydrology plan to the City. The plan shall address all proposed on-site drainage, including all potential daily and storm run-off, methods of proposed discharge, conformance with NPDES, and standards relative to flood control. The plan shall be prepared to the satisfaction of the Director of Public Works.
- VII.2 Prior to the release of the grading permit, the applicant shall demonstrate to the satisfaction of the Director of Planning and Building that all issues relative to the existing Los Angeles County sewer main which travels through the project site have been considered. Such demonstration shall include the appropriate plans and documentation to address the condition of the sewer main, the status of an easement over the sewer main, how the sewer main shall remain accessible and how the proposed development will affect the sewer main.

Cumulative Impacts

None are anticipated

Unavoidable Significant Impacts

None are anticipated.

VIII. LAND USE AND PLANNING

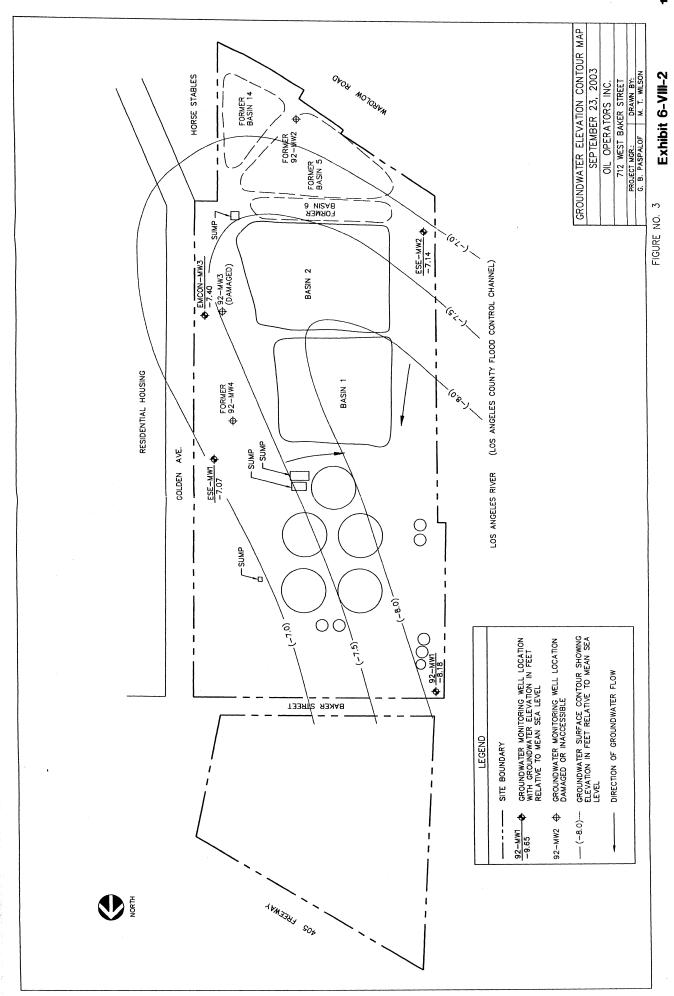
Existing Setting

The site of the proposed project is roughly a 20-acre rectangular parcel located in the west-central area of the City of Long Beach, north of the intersection of West Wardlow Road, south of the 405 Freeway and bounded on the east and west by Golden Avenue and the Los Angeles River, respectively (See Exhibit 6-VIII-1.) A section of Baker Street transects the northern portion of the site, terminating at the western site boundary. Existing improvements on the site include, two large clay-lined detention basins, five large concrete skimming basins, two aboveground storage tank bases, numerous underground pipelines, abandoned building foundations, and asphalt paved areas.

The site is currently occupied by an oil production wastewater treatment facility that has been in operation since the 1920s. The water treatment process removed oil and sediment from the water, allowing the treated water to be disposed of offsite. As a by-product of this process, a low-grade oil was recovered for recycling.

From 1926 to the mid 1950s, oil production brine was piped into the clay-lined basins, where the water underwent separation and skimming processes to remove oil and sediment prior to disposal of the water. In the mid 1950s, a water treatment plan was constructed onsite consisting of five circular concrete basins with associated pumps, tanks, pipelines and other facilities. The treatment plant was located north of the two large rectangular basins referred to as Basins 1 and 2. (See Exhibit 6-VIII-2.) Basin 1 was found to contain an estimated 5,000 cubic yards of residual oily solids that settled out of the oil production brine water processed through the site. Basin 2 received relatively clean water from the process, and the water was ultimately released to the sanitation district for disposal. Historically, additional smaller basins were present south of Basins 1 and 2. These smaller basins were closed in 1986 and 1987. In 1998, the facility ceased formal operation. Currently, the remediation of Basin 1 is outlined in the Corrective Action Plan, which is included in the Appendix C.





According to information contained in the Corrective Action Plan for Basin 1, the property has been undergoing decommissioning in phases since 1998. Much of the vacant area of the property had been leased to a plant nursery, but the nursery vacated in 1999. In 2000, the City of Long Beach ordered the demolition of all buildings, sheds and similar structures. In 2001, the City of Long Beach ordered the removal of all contents and the demolition of the above-ground tanks. These tanks were removed with the exception of bases or floors of two tanks with related pipelines.

Existing land uses in the vicinity of the proposed project include single-family homes to the east across Golden Avenue and to the south across Wardlow Road, former horse stables and storage facility located directly southeast, the 405 Freeway to the north, and Los Angeles River Channel to the west.

Planning and land use decisions are regulated by the following:

A. General Plan

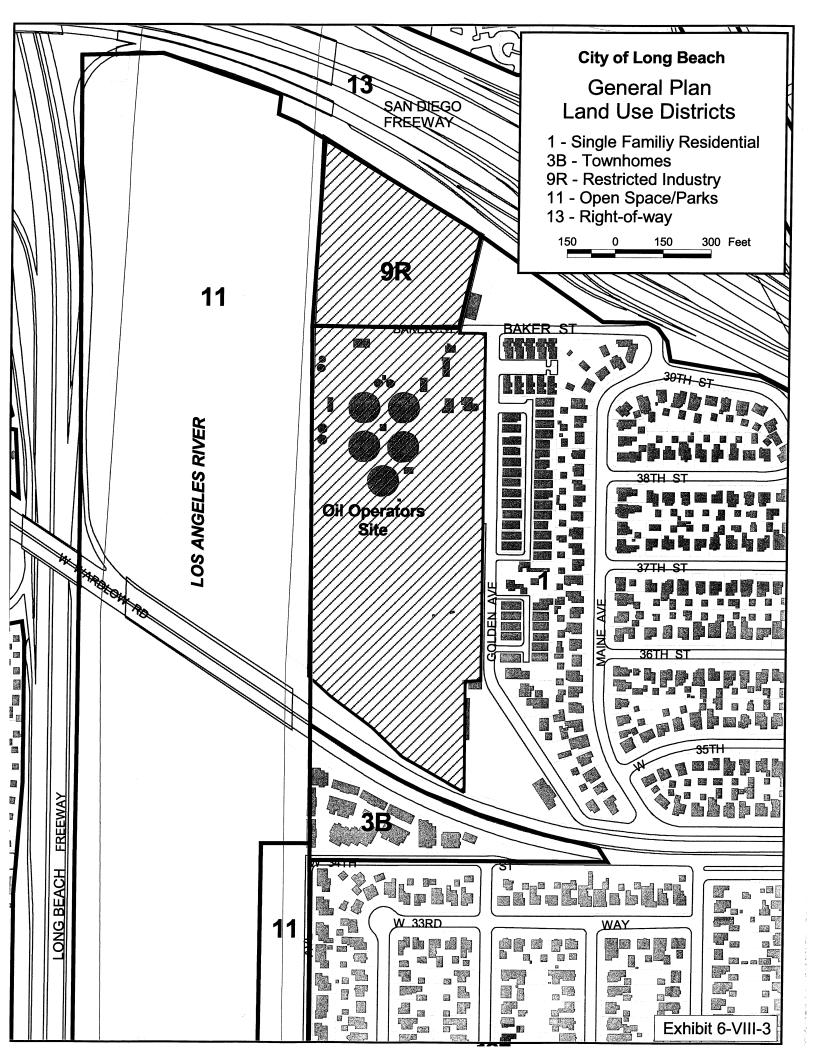
The Land Use Element of the General Plan identifies the project area as Land Use District 1 (Single-Family.) See General Plan Map depicted in Exhibit 6-VIII-3. This land use district is the most common of the City's land area and is intended to maintain the presence of single-family homes.³

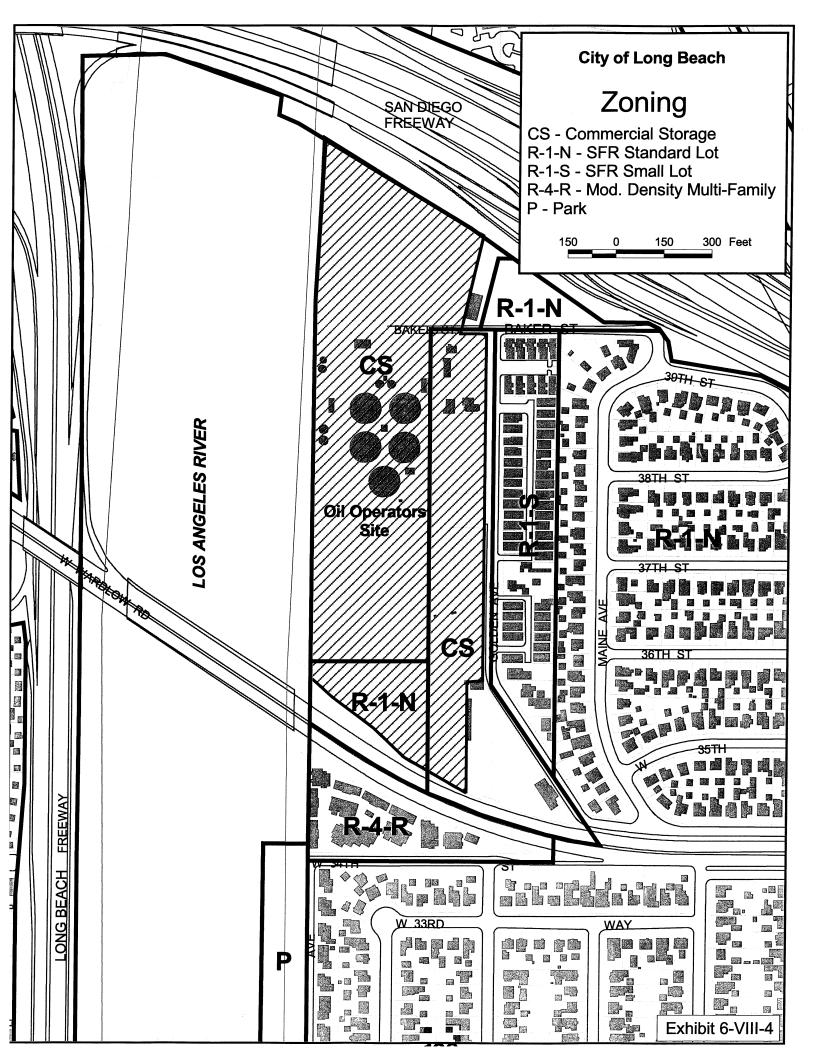
B. Zoning Designation

The City's Zoning Ordinance is contained in Title 21 of the Long Beach Municipal Code. The zoning designation for the project area is CS – Commercial Storage. The CS districts permits storage uses as well as some discretionary, accessory and/or temporary uses subject to approval. These include but are not limited to uses such as: auto detailing, car wash, parking service, private club, social club, pool hall, hall rental, daycare/preschool, interim parks, flower cart/news cart, communication facilities, temporary uses like a construction trailer or a special event. "The Commercial Storage (CS) District encourages storage uses in areas which are particularly difficult to use due to parcel shape, access, adverse environmental conditions, or in areas where parcels are needed to form a buffer from incompatible uses." Exhibit 6-VIII-4 depicts the zoning designation of the project site.

⁴ City of Long Beach, Title 21, p. Z-154.1, 2000.

³ City of Long Beach, General Plan Maps and Descriptions of Land Use Districts, pgs. 53-55, 1989.





C. Los Angeles River Master Plan

In 1996, the Los Angeles River Master Plan was unanimously approved by the Los Angeles County Board of Supervisors. The plan formulated a multi-objective program that recognized the River's primary purpose of flood control, but included aesthetic, safety, economic, environmental, and recreational components. In the region of Long Beach, the plan recognizes a future park in the area of the proposed project.⁵

Anticipated Impacts

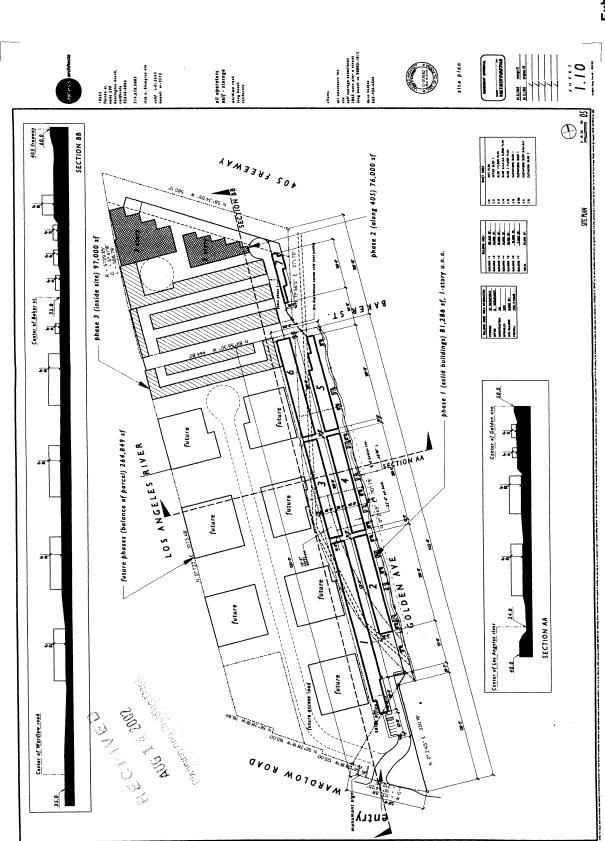
The following land use analysis addresses existing and future uses of the project site and uses of the adjacent properties, which could be affected by the proposed project. It is assumed that the Land Use Element of the Long Beach General Plan would be amended to be consistent with the existing zoning designation and proposed action upon its approval prior to the implementation of the proposed project. Certain considerations related to land use, including, aesthetics, biological resources, hazards & hazardous materials, utilities/service systems, hydrology/water quality, air quality, geology/soils, and transportation are considered in their respective sections of this document.

The proposed action includes all appropriate site remediation and phasing construction of approximately 516,135 square feet of self-storage uses. Phase 1 of the project will consist of approximately 106,00 square feet of single-story selfstorage uses housed in seven (7) individual buildings. This will include approximately 2,000 square feet designated for administrative offices and 720 storage units. Phase 2 of the project will consist of approximately 76,000 square feet of two and three-story self-storage uses housed in two (2) structures. This will include approximately 650 storage units. Phase 3 of the project will consist of approximately 97,000 square feet of one- and two-story self-storage uses housed in six (6) buildings with approximately 850 storage units. Phase 4 of the project will consist of approximately 237,135 square feet of self-storage uses housed in six (6) two-story buildings. There will be approximately 3,215 total storage units upon the completion of all phases. Prior to the completion of all recreational vehicle storage will be an interim use with up to 650 vehicles stored on-site. Access to the site will be taken from Wardlow Road with the exception of any emergency access deemed necessary by the Long Beach Fire Department. See Exhibit 6-VIII-5.

A. General Plan Consistency

The proposed project is not found to be consistent with the current General Plan land use designation (LUD 1 – Single Family.) The LUD 1 designation does not

⁵ Los Angeles County, Los Angeles River Master Plan, 1996.



reflect prior or current land use of the proposed project site. The property was so designated because of the proximity of adjacent single-family development. Site constraints, including but not limited to, site contamination, site access, proximity to the Los Angeles River and 405 Freeway have contributed to the reexamination of this land use designation. In order to meet the General Plan consistency requirement, the land use designation would need to be amended to reflect the site's current zoning designation.

B. Zoning

The proposed project is consistent with the current zoning designation of CS – Commercial Storage. The proposed project is a permitted land use under the CS zoning designation. The project will be required to meet all applicable development standards outlined in Title 21 of the Municipal Code, or apply for relief under the requirements of a standards variance.

C. Los Angeles River Master Plan

The Los Angeles River Master Plan recognizes a future park in the vicinity of the proposed project. Currently, the City of Long Beach owns parcels adjacent to the project site and has plans to develop the area for future park use. Ideally, the proposed project site would be included in the City's future park plan for the area. However, the size of the proposed park project is not delineated in the Los Angeles River Master Plan. If a park use for the area is still feasible without the proposed project site, then the project could still be considered consistent with the Los Angeles River Master Plan. If the feasibility of the park proposal is compromised by the development of the proposed project, then the project would not be considered consistent with the Los Angeles River Master Plan.

D. On-Site Land Use Impacts

Prior to the development of the proposed project, the subject site must undergo appropriate site remediation to remove all on-site contaminants. This process and the responsible agencies are discussed further in the Hazards and Hazardous Materials analysis.

Prior to any grading, the project site will be cleared of surface obstructions, including, but not limited to structures, basins, storage tanks, foundations, pipelines, existing debris, potentially compressible material and stripped of existing vegetation. This action is discussed further in the Geology and Soils analysis.

Construction of the project is proposed to occur in four phases. See Exhibit 6-VIII-5. The first phase is depicted running parallel along Golden Avenue. The

second phase is adjacent to the 405 Freeway including two three-story buildings. The third phase is shown abutting Baker Street. The proposed phase appears in the conceptual plans to incorporate the Baker Street right-of-way. This right-of-way must be vacated by the City prior to the development of the proposed project. The fourth phase occurs along the Los Angeles River. Recreational vehicle storage is proposed as an interim use for the undeveloped portions/phases of the site. This may bring up to 650 recreation vehicles to be stored on-site. Title 21 of the Municipal Code allows development standards to minimize impacts from interim uses. Access to the site will be taken from Wardlow Road to minimize impact to the adjacent neighborhood.

The construction of the proposed project would eliminate existing blight and remove the environmental contamination of the project site.

E. Surrounding Land Use Impacts

The northern, southern and western edges of the project site are clearly defined respectively, by the 405 Freeway, Wardlow Road and the Los Angeles River. Residential development exists across Wardlow Road, but the major arterial provides a significant buffer. The proposed project does not present a land use incompatibility to existing uses adjacent to the north, south, or western boundaries of the site.

East of the proposed project site is a single-family residential neighborhood. There is an existing wall constructed along Golden Avenue that functions as a screen between the residential development and the site. The previous operating wastewater treatment facility was not a compatible land use with the adjacent residential uses. The site is currently non-operational, visually blighted and contaminated by the former wastewater treatment facility. The proposed project will bring site remediation and the removal of on-site blight. The conceptual plans depict a significant landscaped area along Golden Avenue to provide a visual screen and buffer between the proposed storage facility and residential neighborhood. This proposed buffer will visually enhance and provide aesthetic amenities to the residential neighborhood while providing adequate separation between the two land uses.

Potential noise, aesthetic, air quality, and transportation impacts to adjacent land uses will be addressed in respective sections of the DEIR.

Mitigation Measures

VIII-1 The City of Long Beach will be required to amend its General Plan to be consistent with the existing zoning designation and proposed land use.

- VIII-2 If the Baker Street right-of-way is incorporated into the proposed project, the right-of-way must be vacated prior to the development of the proposed project.
- VIII-3 The applicant shall meet all applicable development standards outlined in Title 21 of the Municipal Code, or apply for and receive approval for a standards variance.
- VIII-4 The applicant must meet all development standards related to the interim use of recreational vehicle storage to the satisfaction of the City of Long Beach Director of Planning & Building.
- VIII-5 The applicant shall construct a significant buffer along the eastern boundary of the site abutting Golden Avenue with a meandering walkway, sitting areas, landscaping and a split face block wall to the satisfaction of the City of Long Beach Director of Planning & Building.

Cumulative Impacts

Like the proposed project, the cumulative projects are expected to be developed in accordance with relevant land use plans and regulations. Based on available regarding cumulative development, it is reasonable to assume that these projects will implement and support applicable planning goals and policies.

Unavoidable Significant Impacts

No unavoidable significant impacts are anticipated to land use after the implementation of the mitigation measures.

IX. MINERAL RESOURCES

Existing Setting

The project site consists of approximately 20 acres of land that was formerly used to store and separate water and other fluids from oil pumped at wells in Long Beach and Signal Hill. The site includes basins where water and other fluids have been stored before and after treatment. The site has functioned as a place to store byproducts of oil production. The site has not functioned as a source of production.

Anticipated Impacts

The proposed project, a self-storage facility, would be constructed in four phases. The project site is not delineated on any land use plan as the recovery source of a mineral resource that is of local importance. As a result, there would no loss of such a recovery site. Development of the self-storage facility would also not be anticipated to result in the loss of availability of any other known mineral resource that would be of value to the local region or to the state.

Mitigation Measures

None are required.

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

None are anticipated.

X. National Pollution Discharge Elimination System

Existing Setting

This section specifically addresses potential impacts to storm water and flood control facilities resulting from implementation of the proposed project.

The project site, a former oilfield brine water treatment facility, is located in the central west part of the City. As previously described, the project site is bordered by the Los Angeles River to the west, the San Diego Freeway (I-405) to the north, single family residential to the east beyond Golden Avenue and Wardlow Road to the south. The project site is approximately 20 acres in size and is situated at a lower elevation than all surrounding areas.

Anticipated Impacts

Because the project site is at a lower elevation than the surrounding rights-of-way (I-405 and Wardlow Road) and the surrounding land uses, the anticipated impacts of the proposed project would be expected to be less than if the project site was at a higher elevation and had the potential to drain off-site in all directions.

Development of the proposed project would result in the project site evolving from acreage that currently permits drainage into the earth into a largely impervious surface covered by structures and hardscape. It would be necessary for the applicant to practice Best Management Practices during all phases of development of the self-storage facility. This would include site preparation (remediation and clean up), during grading and each phase of construction, and during day-to-day operation of the facility.

Mitigation Measures

Due to the size of the project site (disturbance of greater than one acre), the applicant will be required to comply with the following mitigation measures:

- X.1 Prior to the release of the grading permit, the applicant shall prepare and submit a Storm Drain Master Plan to identify all storm run-off and methods of proposed discharge and shall be approved by all impacted associated agencies. (Also listed under Hydrology).
- X.2 Prior to the release of the grading permit, the applicant shall prepare and submit for approval to both the City of Long Beach and the Regional Water Quality Control Board (RWQCB) a Storm Water Pollution Prevention Plan (SWPPP) that covers all activity during site preparation, grading and construction. The SWPPP shall include all appropriate

construction site Best Management Practices (BMPs) as listed on the project plans.

- X.3 Prior to the release of any grading or building permit, the project plans shall include the appropriate construction activities BMPs and erosion and sediment control BMPs as published in the "California Storm Water Best Management Practices Handbook (1993)": CA-10 through CA-12, CA-20, CA-21, CA-23, CA-30 through CA-32, ESC-1 through ESC-56. (Source: Section 18.95.050 of the Long Beach Municipal Code).
- X.4 Prior to the release of any grading or building permit, the project plans shall include a narrative discussion of the rationale used for selecting or rejecting BMPs. The project architect or engineer of record, or authorized qualified designee, shall sign a statement on the plans to the effect: "As the architect/engineer of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activities."
 (Source: Section 18.95.050 of the Long Beach Municipal Code).
- X.5 Prior to the release of the grading permit, the applicant shall file with the Regional Water Quality Control Board (RWQCB) a Notice of Intent (NOI) to comply with the State construction activity storm water permit. Evidence of such filing shall be submitted to the City. (Source: Section 18.95.050 of the Long Beach Municipal Code).
- X.6 Prior to the release of the building permit, the applicant shall prepare and submit for approval a Storm Water Pollution Prevention Plan (SWPPP) for post construction activities and ongoing operation of the facility.

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

With proper mitigation, the project does not have the potential to violate the National Pollution Discharge System Permit. Therefore, no unavoidable significant impacts are anticipated.

XI. NOISE

Existing Setting

The project site, a former oilfield brine water treatment facility, is located in the central west part of the City. As previously described, the project site is bordered by the Los Angeles River to the west, the San Diego Freeway (I-405) to the north, single family residential to the east beyond Golden Avenue and Wardlow Road to the south. The project site is approximately 19 acres in size and is situated at a lower elevation than all surrounding areas.

Existing noise levels in the vicinity of the project site can be attributed primarily to the adjacent and nearby freeways, particularly the elevated ramp to the I-405 freeway. The existing ambient is approximately 65 dBA.

Anticipated Impacts

Noise is defined as unwanted sound that disturbs human activity. Any noise above existing ambient noise levels would be considered significant. Potential noise that could result from development of the proposed project would be associated with either the construction phase or, alternatively, the operation of the project once it is completed.

Construction Noise

The nearest residential neighborhood is located east of Golden Avenue, which runs along the east side of the project site. This neighborhood may be subjected to short-term noises generated by project-related construction activities on the project site. During remediation and clean up, site preparation and grading, and construction of the proposed project, there would be substantial temporary or periodic increases in the ambient noise levels in the project vicinity above levels that currently exist without the proposed project.

There would be short-term, intermittent noise impacts associated with the transportation of equipment, materials and workers to and from the project site. Development of the proposed project would involve multiple steps of a lengthy process with different equipment being used during each step on the project site. Therefore, the nearby residents could expect a variety of noises of different characteristics and duration throughout the development process.

Mitigation of such noise would be necessary during the remediation, site preparation and construction phases of the proposed project.

Operational Noise

The proposed project is a self-storage and recreational vehicle storage facility. Operation of such a facility would not be expected to create noise levels in excess of those established by the City's Noise Ordinance.

Mitigation Measures

The applicant shall be required to comply with the following mitigation measures:

XI-1 Any person (s) associated with the proposed project shall only operate or permit the operation of any tools or equipment used for remediation, site preparation, construction or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the following hours:

Weekdays 7:00am to 7:00pm Sundays No work permitted Saturdays 9:00am to 6:00pm Holidays No work permitted.

The only exception shall be if the Building Official gives authorization for emergency work at the project site.

- XI-2 Prior to the operation of any piece of equipment during remediation, site preparation or construction on the project site, the applicant shall have taken the necessary steps to limit the impact of on-site noises to the adjacent residential neighborhood. Such steps may include but shall not be limited to, noise attenuation shields, site perimeter sound barrier, etc. The applicant shall be prepared to demonstrate in the field, upon request. All measures which have been taken to mitigate the offending noises.
- **XI-3** Prior to the release of building permits, the applicant shall demonstrate compliance with Title 24 for noise attenuation and energy conservation.
- XI-4 Prior to the release of the certificate of occupancy, the applicant shall have constructed an eight-foot high permanent sound barrier around the perimeter of the project site.

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

Short-term, intermittent, single-event noises during the remediation, site preparation and construction phases would be unavoidable. Therefore, the City

of Long Beach must adopt a Statement of Overriding Considerations for short-term noise occurrences, prior to project approval.

XII. POPULATION AND HOUSING

Existing Setting

The Land Use Element designates the site for single-family residential Zoning regulations permit commercial storage and with RV parking as an interim use. These regulations would permit approximately 138 dwelling units, based on 6,000 square foot lots. However, the actual number would be less because infrastructure was not considered in the calculation. Actual numbers would depend upon the proposed layout.

Anticipated Impacts

The proposed amendments to the planning regulations and the project would permanently eliminate the possibility of constructing dwelling units on site. This loss of housing represents less than one half percent of the required housing as specified in the Housing Element. Significant impacts are therefore not anticipated.

Mitigation Measures

None are required and none are recommended.

Cumulative Impacts

Elimination of the potential for housing will permanently eliminate the possibility of housing on the site.

Unavoidable Adverse Impacts

None are anticipated.

XIII. PUBLIC SERVICES

Existing Setting

Fire Protection

Fire protection is provided by the Long Beach Fire Department. The Department has 26 in-city stations, as depicted in Exhibit 6-XIII-1. The Department is divided into four separate bureaus, including: Fire Prevention, Fire Suppression, Bureau of Instruction, and the Bureau of Technical Services. The Fire Department is responsible for medical, paramedic, and other first aid rescue calls from the community. The project area is principally served by Station 9, located at 3917 Long Beach Boulevard. However, any fire unit in the Department may respond to the project location depending on availability.

Police Protection

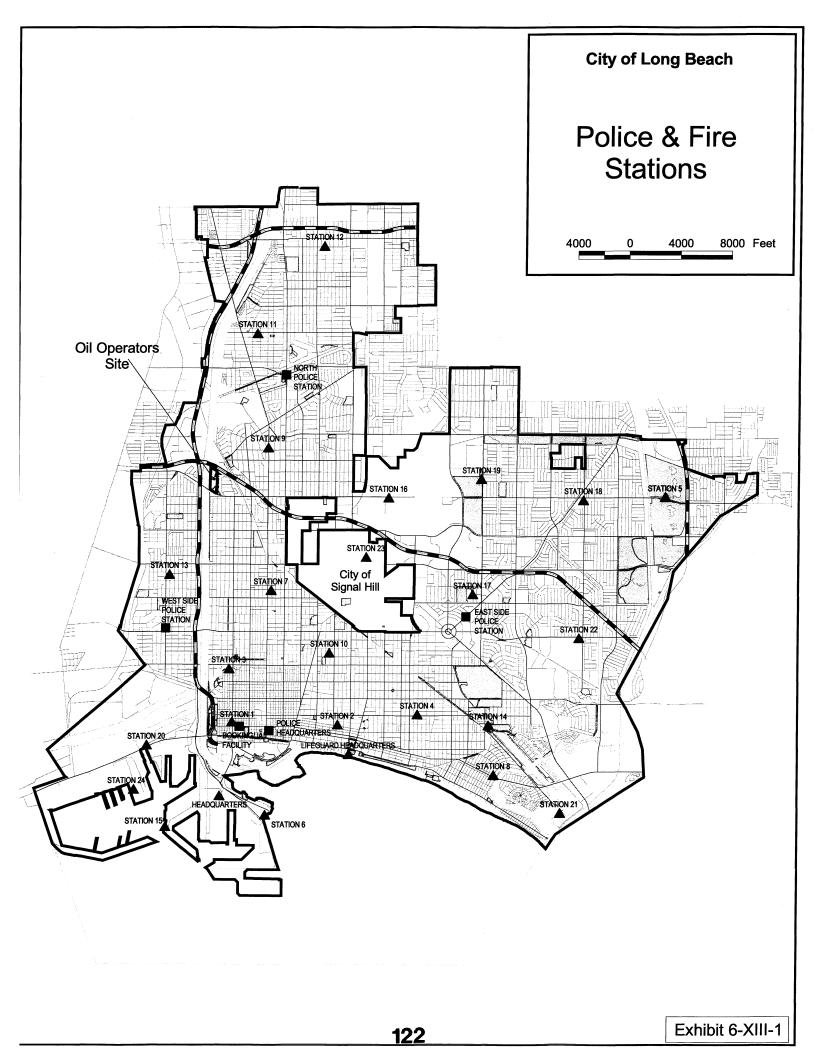
The project site is served by Long Beach Police Department. The Department is divided into Patrol, Traffic, Detective, Juvenile, Vice, Community, Jail, Records, and Administration Bureaus. The City has four patrol divisions: North, South, East, and West. The North Division services the project area.

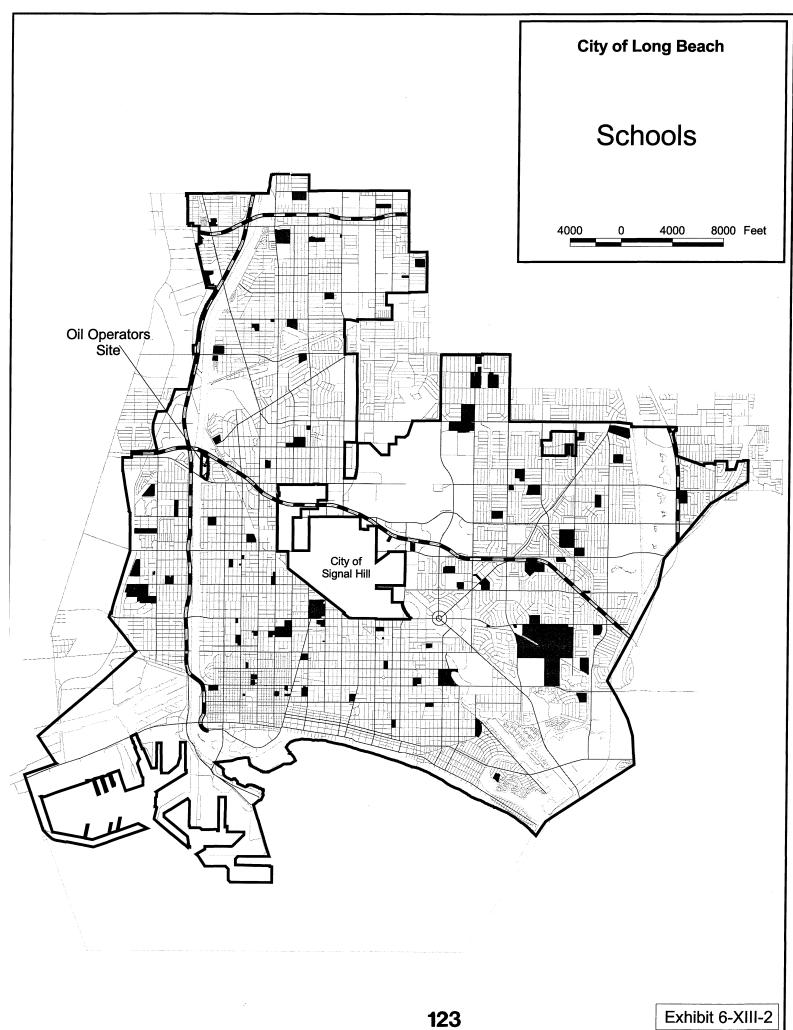
Public Education

The City of Long Beach is primarily served by the Long Beach Unified School District, which also serves the Cities of Signal Hill, and most of Lakewood. Exhibit 6-XIII-2 illustrates the location of all schools within the School District boundaries. In recent years, the School District has been operating at or over capacity.

Park Facilities and Recreational Services

The City of Long Beach Department of Parks, Recreation, and Marine provide park and recreation facilities in the project area. Existing City of Long Beach parks within the project vicinity include: Los Cerritos Park at 3750 Del Mar Avenue, and Veterans Park at 101 East 28th Street. These parks range in size from 7.24 acres to 14.69 acres and provide such amenities as play areas, picnic areas, ball fields, tennis courts, and a recreation center at Veterans Park. In addition, the Los Angeles River Bike Trail is located along the eastern boundary of the project site.





INCREASED DEMAND FOR FIRE PROTECTION SERVICES

Impact Analysis

The construction and operation of the proposed project may potentially increase the overall demand on fire protection services in the area. The proposed project may place an increased workload on the City of Long Beach Fire Department (LBFD) Fire Prevention and Suppression Divisions during construction due to the increase in construction workers, construction traffic, and other activities on the construction site.

Construction could affect circulation in the vicinity of the project site periodically and if not properly managed, could result in temporarily increased response times for fire and emergency services in the area. The potential for these impacts would only exist during the construction phase of the proposed project, and would be mitigated by an emergency access and response plan that would identify alternate routes for emergency access to the project site and area. The emergency response plan would be reviewed and approved by the LBFD prior to any site preparation, grading, and construction activities.

All structures will be constructed to conform with applicable State and City building codes and LBFD and California Fire Code safety standards, including: location of existing fire hydrants, current fire flow test from the Long Beach Water Department, location of proposed on site fire hydrants, and the type of building construction and which buildings are being sprinklered.

INCREASED DEMAND FOR POLICE PROTECTION SERVICES

Impact Analysis

Police services would be provided by the City of Long Beach Police Department (LBPD) north division police facility located at 4891 North Atlantic Avenue, on the southwest corner of Del Amo Boulevard and Atlantic Avenue. This facility is approximately 3 miles from the proposed project site. At this time, the project site is mostly undeveloped, providing limited data with which to assess future activity levels and response times.

To ensure adequate services are provided and to minimize the demands on police service, security and design measures that employ defensible space concepts should be utilized in development and construction plans. These measures incorporate the concepts of Crime Prevention Through Environmental Design (CPTED) which involves consideration such as the placement and orientation of structures, access and visibility of public areas, placement of doors, and landscaping. CPTED promotes public safety and physical security.

Construction could affect circulation in the vicinity of the project site, resulting in temporarily increased response times for police and emergency services in the area. The potential for these impacts would only exist during the construction phase of the proposed project and would be mitigated by an emergency access and response plan that would identify alternate routes for emergency access to the project site and area. The emergency response plan would be reviewed and approved by the LBPD prior to any site preparation, grading, and construction activities.

Security and lighting for the proposed project are concerns within the surrounding community. Because of poor nighttime illumination near the project site, and its somewhat remote location, there is the potential for theft, vandalism, and an increase in police service calls. The potential for these impacts would exist during both the construction and operational phases of the project, and would be mitigated by a security and exterior lighting plan that would identif6y types and locations of security devices, as well as types and locations of exterior lighting.

Mitigation Measures

- XIII-1 Prior to issuance of a building permit, the project applicant shall submit an emergency access plan to the City of Long Beach Fire Department for review and approval. This plan will identify alternate routes for emergency access during construction activities.
- XIII-2 Sufficient accessibility for fire-fighting equipment shall be provided during all phases of construction and subsequent operation.
- XIII-3 The City of Long Beach Fire Department shall review and approve development plans to ensure compliance with all applicable fire and building codes, adequate access for fire-fighting equipment, and that fire protection facilities are available.
- XIII-4 Prior to issuance of a building permit, the project applicant shall submit an emergency access plan to the City of Long Beach Police Department. This plan will identify alternate routes for emergency access during construction, to areas potentially blocked by project related construction activities.
- XIII-5 Prior to issuance of a building permit, the project applicant shall submit a security and lighting plan to the City of Long Beach Police Department. This plan will identify types and locations of

security devices, as well as types and locations of exterior lighting.

XIII-6 Prior to the issuance of the building permit, project applicant shall submit a plan that incorporates the concepts of CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN TO THE CITY OF LONG BEACH POLICE DEPARTMENT.

Cumulative Impacts

No cumulative impacts are anticipated with respect to public services.

Unavoidable Significant Impacts

No unavoidable significant impacts are anticipated with respect to public services.

XIV. TRANSPORTATION

Introduction

The traffic consulting firm of Linscott, Law and Greenspan Engineers (LL&G) was retained by the applicant to prepare the traffic impact analysis report for the self-storage facility project. The Traffic Study in its entirety is provided in Appendix B. The traffic consultant focused on evaluating the potential traffic impacts of the proposed project on the streets and intersections in the immediate vicinity. The transportation system that may be affected by the proposed self-storage project includes both local and sub-regional highway systems.

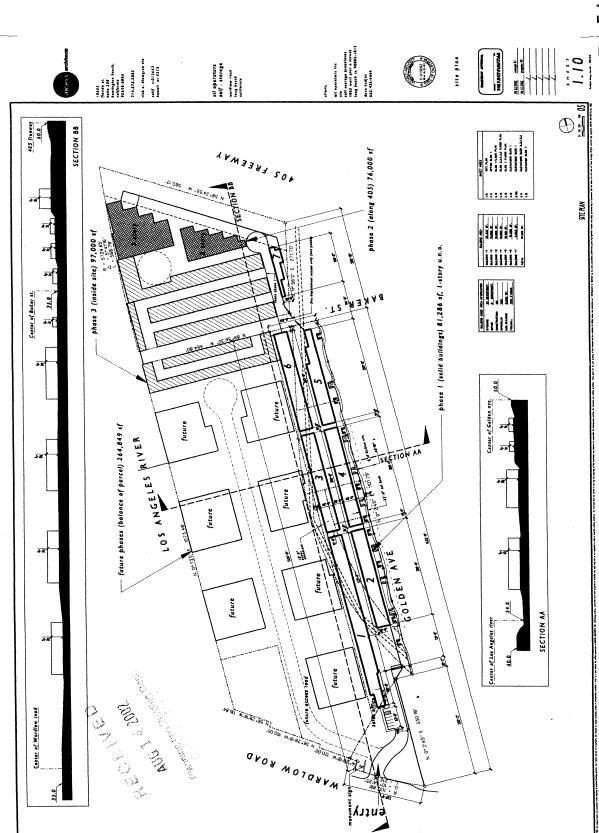
The traffic report analyzes existing and future near-term peak hour traffic conditions upon completion of the self-storage project. Peak traffic forecasts for the 2004 horizon year have been projected by increasing existing traffic volumes by an annual growth rate of 2 percent. The application of this growth rate to existing 2002 traffic volumes (the year the original traffic study was produced) results in a four percent (4%) growth in existing volumes at the four key study intersections to the 2004 horizon year. The key intersections selected for analysis include:

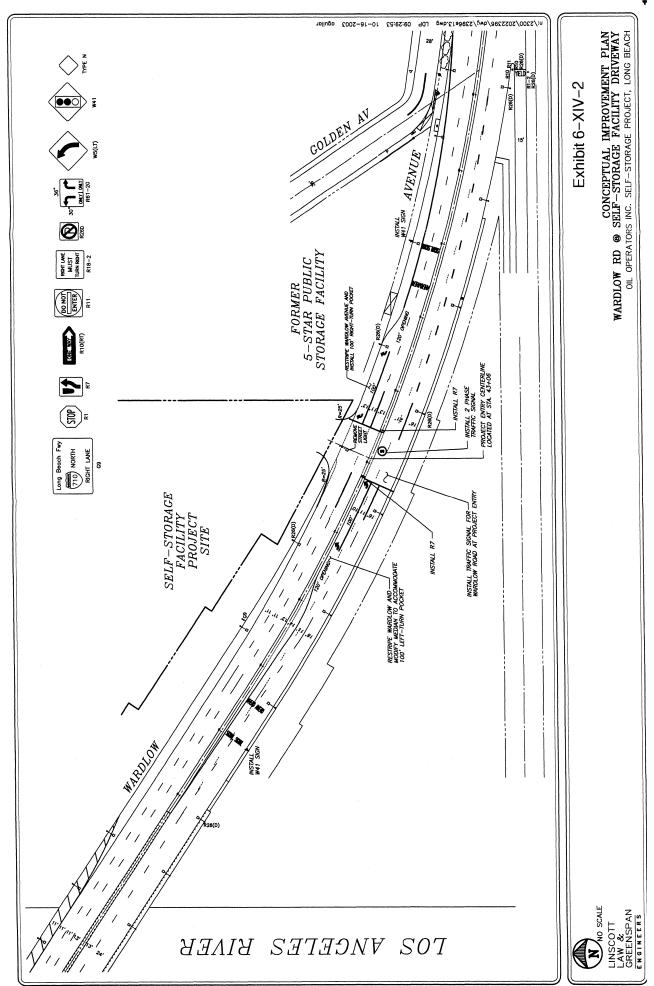
- Wardlow Road at Santa Fe Avenue
- Wardlow Road at Magnolia Avenue
- Wardlow Road at Pacific Place
- Wardlow Road at Long Beach Boulevard

The Volume-Capacity (V/C) characteristics and Level of Service (LOS) investigations for the AM and PM peak hour at these four locations were utilized to evaluate the potential traffic-related impacts associated with the proposed project and future growth in the vicinity.

Existing Setting

Exhibit 6-XIV-1 depicts the conceptual site plan for the proposed self-storage and RV Storage facility. Ingress and egress to the project site will be provided via a new access point from Wardlow Road. There will be no public access to the site via Baker Street or Golden Avenue, eliminating project associated traffic within the residential neighborhood located immediately east of the project site. Roadway improvements to accommodate the proposed project are planned for Wardlow Road and are depicted in Exhibit 6-XIV-2.





Street Network

Regional access to the self-storage facility site is provided primarily by the Long Beach (I-710) and San Diego (I-405) freeways. The six-lane Long Beach Freeway is located due west of the project site and intersects the eight-lane San Diego Freeway approximately one-quarter mile northwest of the project site. The Long Beach Freeway is a major infrastructure facility which extends through Los Angeles County and links Long Beach with the neighboring communities of Carson, Paramount, Lakewood, and Compton as well as more distant locations such as Los Angeles and South Pasadena. Primary access to and from the Long Beach Freeway is provided via the freeway ramps at Wardlow Road. The principal local network of streets serving the project are Wardlow Road, Magnolia Street, Long Beach Boulevard, and Santa Fe Avenue. The following is a brief description of these key streets.

- Wardlow Road is a four-lane divided roadway oriented in the east-west direction, which borders the project site to the south. On-street parking is permitted along the majority of this roadway in the vicinity of the project. The posted speed limit on Wardlow Road is 40 miles per hour (mph) between the Long Beach Freeway (I-710) and Long Beach Boulevard. Traffic signals control the study intersections of Wardlow Road and Santa Fe Road, Magnolia Avenue, Pacific Place and Long Beach Boulevard. Daily traffic on Wardlow Road west of Magnolia Avenue totals 19,832 vehicles per day (vpd) on a 'typical' weekday.
- Magnolia Avenue is a north-south roadway, located east of the project site. North of Wardlow Road, this undivided roadway provides two travel lanes, one in each direction. This section of Magnolia Avenue is located in a residential area with a speed limit of 25 mph. South of Wardlow Road, Magnolia Avenue becomes a four-lane, undivided roadway with a speed limit of 35 mph. On-street parking is permitted on any section of Magnolia Avenue. A traffic signal controls the study intersection of Magnolia Avenue and Wardlow Road.
- Pacific Place is a four-lane divided roadway north of Wardlow Road and a four-lane undivided roadway south of Wardlow Road oriented in the north-south direction. North of Wardlow Road, curbside parking is allowed only on the west side, as the east side of the of the roadway is allocated for metro-rail blue line stops. South of Wardlow Road, Pacific Place permits parallel parking on the east side, but prohibits parallel parking on the west side. The posted speed limit along this roadway is 40 mph. A traffic signal controls the study intersection of Pacific Place and Wardlow Road.

 Long Beach Boulevard is a four-lane, undivided roadway north of Wardlow Road and a six-lane divided roadway south of Wardlow Road oriented in the north-south direction. Parking is permitted on either side of this roadway, within the vicinity of the project. The posted speed on Long Beach Boulevard is 35 mph. A traffic signal controls the study intersection of Long Beach Boulevard and Wardlow Road.

Exhibit 6-XIV-3 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this section. The exhibit identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key areas neighboring the project site.

Intersection Conditions

In conformance with the City of Long Beach and LA County CMP requirements, existing AM and PM peak hour operating conditions for the four key intersections were evaluated using the Intersection Capacity Utilization (ICU) methodology. The ICU technique reflects the flow characteristics of an intersection and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent of required signal green time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service that have been defined, along with the corresponding ICU value range, are shown in Table 6-XIV-A. The ICU value is the sum of the critical volume to capacities ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements.

According to City of Long Beach General Plan criteria, LOS 'D' ($0.81 \le ICU \le 0.90$) is the minimum desirable condition that should be maintained during the peak commute hours, or the current LOS if the existing LOS is worse than LOS 'D' (i.e. LOS 'E' or 'F').

Per LA County CMP requirements, the ICU calculations utilize a lane capacity of 1,600 vehicles per hour (vph) for left-turn, through, and right-turn lanes, and dual left-turn capacity of 2,880 vph. Per City of Long Beach requirements, a clearance adjustment factor, which varies between 0.100 and 0.180, will be added to each Level of Service calculation.

Further, the ICU/LOS calculations for the intersection of Pacific Place and Wardlow Road were artificially adjusted to account for signal pre-emption and the

delay motorists experience from the Blue Line light rail transit crossing located immediately east of the intersection.

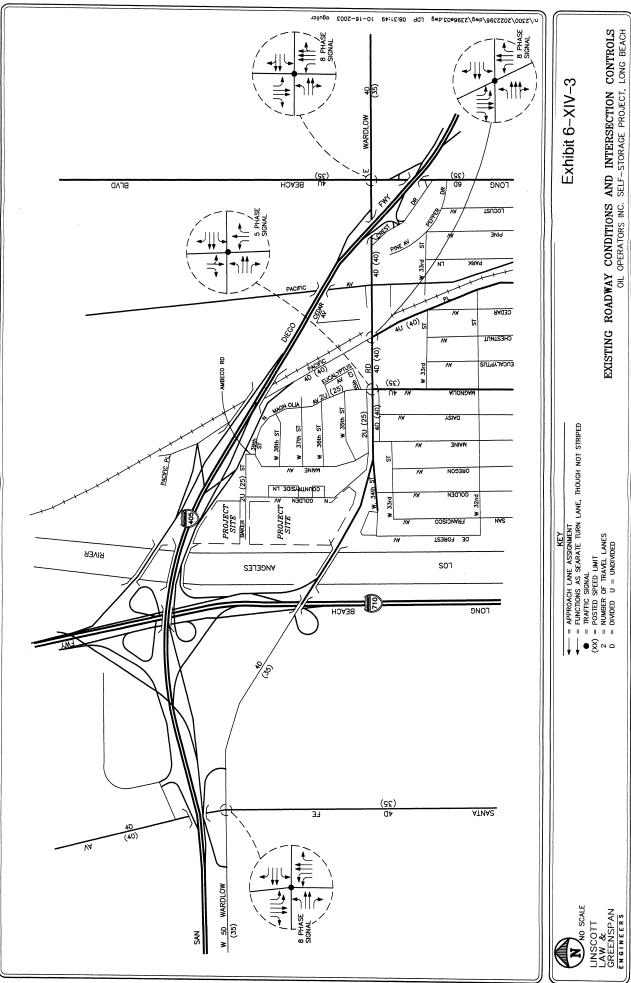




Table 6-XIV-A

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS¹ Self-Storage Facility, Long Beach

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	0.00 - 0.60	Free Flow; Very low delay, less than 5.0 seconds per vehicle.
В	0.61 - 0.70	Rural Design; Delay in the range of 5.1 to 15 seconds per vehicle.
С	0.71 - 0.80	Urban Design; Delay in the range of 15.1 to 25 seconds per vehicle.
D	0.81 - 0.90	Maximum Urban Design; Delay ranges from 25.1 to 40 seconds per vehicle.
E	0.91 - 1.00	Capacity; Delay ranges from 40.1 to 60 seconds per vehicle.
F	≥ 1.01	Forced Flow; Delay in excess of 60 seconds per vehicles.

Refer to Appendix B for detailed explanation of the ICU methodology and LOS Concept.

Based on recent weekday observations of the Blue Line light rail crossing on Wardlow, it was observed that each train during the AM peak hour and PM peak hour took approximately 30 to 40 seconds to clear Wardlow Road. During this time, the railroad gate arms prohibited east-west traffic flow on Wardlow Road.

To account for a "maximum observed delay" of 40 seconds per train during both the AM peak hour and PM peak hour, an adjustment factor of 0.20 was added to the LOS calculation at Pacific Place and Wardlow Road (0.20 = 40 seconds per train x 18 trains per hour / 3600 seconds per hour). This 0.20 adjustment factor, which is added to the ICU/LOS calculations, indicates Blue Line light rail transit crossing accounts for 20 percent of the required green time and thus, capacity.

The ICU method of analysis and LOS concept is described in further detail in Appendix B. Appendix B also presents the ICU/LOS calculations at each of the key intersections for the weekday AM and PM peak hours.

Existing Level of Service Results

Table 6-XIV-B summarizes the existing peak hour service level calculations for the four key study intersections based on existing traffic volumes and current street geometry. Review of Table 6-XIV-B indicates that three key study intersections currently operate at an undesirable level of service.

The intersections of Santa Fe Avenue at Wardlow Road and Pacific Place at Wardlow Road currently operate at LOS 'E' during the peak PM commute hour. The intersection of Long Beach Boulevard at Wardlow Road currently operates at LOS 'E' during the AM peak hour and LOS 'F' during the PM peak hour. The remaining key study intersection currently operates at LOS 'D' or better during the AM and PM peak hours.

TRAFFIC FORECASTING METHODOLOGY

To estimate the traffic impact characteristics of the proposed Self-Storage Facility, a multi-step process has been utilized. The first step is traffic generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on



Table 6-XIV-B

YEAR 2002 EXISTING PEAK HOUR LEVELS OF SERVICE SUMMARY² Self-Storage Facility, Long Beach

Key Intersections		Time Period	Control Type	ICU (V/C ratio)	LOS	
1.	Santa Fe Avenue at	AM	8Ø Traffic	0.785	C	
	Wardlow Road	PM	Signal	0.971	E	
2.	Magnolia Avenue at	AM	5Ø Traffic	0.664	B	
	Wardlow Road	PM	Signal	0.804	C	
3.	Pacific Place at	AM	8Ø Traffic	0.828	D	
	Wardlow Road ³	PM	Signal	0.916	E	
4.	Long Beach Boulevard at Wardlow Road	AM PM	8Ø Traffic Signal	0.999 1.091	E F	

BOLD ICU/LOS values indicate adverse service levels based on City of Long Beach LOS standards. Appendix B contains ICU/LOS calculation sheets for all study intersections.

Please note that the level of service at this key study intersection takes into account the delay motorists experience by the Blue Line light rail transit crossing located immediately east of the intersection.



Table 6-XIV-C

PROJECT TRAFFIC GENERATION FORECAST⁵ Self-Storage Facility, Long Beach

ITE Land Use Code/	Daily	AM Peak Hour			PM Peak Hour		
Project Description	2-Way	In	Out	Total	In	Out	Total
Weekday Generation Rates:151: Mini-Warehouse (TE/1,000 SF)	2.50	0.09	0.06	0.15	0.13	0.13	0.26
151: RV Storage Facility (TE/Unit)	0.28	0.01	0.01	0.02	0.02	0.01	0.03
Weekday Generation Forecast:Self-Storage Facility (516,000 SF)	1,290	46	31	77	67	67	134
RV Storage Facility (650 spaces)	182	7	7	14	13	7	20

ITE Land Use Code/	Daily	Weekend Peak Hour			
Project Description	2-Way	In	Out	Total	
Weekend Generation Rates:					
• 151: Mini-Warehouse (TE/1,000 SF)	2.33	0.20	0.20	0.40	
151: RV Storage Facility (TE/Unit)	0.25	0.02	0.02	0.04	
Weekend Generation Forecast:					
• Self-Storage Facility (516,000 SF)	1,202	103	103	206	
RV Storage Facility (650 spaces)	163	13	13	26	

Source: Trip Generation, 6th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (1997).

minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and traffic assignments developed, the impact of the proposed project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the project's impacts identified.

THRESHOLDS OF SIGNIFICANCE

Impacts to local and regional transportation systems are considered significant if:

- An undesirable peak hour Level of Service (LOS) (i.e. LOS 'E' or 'F') at any of the key intersections is projected. The City of Long Beach considers LOS 'D' (0.81 ≤ ICU ≤ 0.90) to be the minimum desirable LOS for all intersections. For the City of Long Beach, the current LOS, if worse than LOS 'D' (i.e. LOS 'E' or 'F'), should also be maintained; and
- The project increases traffic demand at the key signalized study intersection by 2% of capacity (ICU increase ≥ 0.02), causing or worsening LOS 'E' or 'F' (ICU > 0.90). At unsignalized intersections, a "significant" adverse traffic impact is defined as a project that: adds 2% of more traffic to delay (seconds per vehicle) at an intersection operating at LOS 'E' or 'F'.

TRAFFIC IMPACT ANALYSIS SCENARIOS

The following scenarios are those for which volume/capacity calculations have been performed at the key intersections for the 2004 horizon year conditions:

- A. 2002 Existing Traffic Conditions
- B. 2004 Future Background (Existing plus Ambient Growth to horizon year 2004 @ 2% per year plus cumulative projects);
- C. 2004 Future Background plus the Self-Storage Facility project; and
- D. Scenario 'C' with planned improvements and/or project specific mitigation, if necessary.

PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Table 6-XIV-E summarizes the AM and PM peak hour Level of Service results at the four key study intersections during a "typical" weekday for the Year 2004. The first column (1) of ICU/LOS values in Table 6-XIV-E presents a summary of existing AM and PM peak hour traffic conditions. The second column (2) lists forecast 2004 background conditions (existing plus ambient growth plus cumulative project traffic) based on existing intersection geometry, but without any traffic generated from the proposed project.

The third column (3) presents future forecast traffic conditions with the addition of traffic generated by the Self-Storage Facility project. The fourth column (4) shows the increase in ICU value due to added project trips and indicates whether the traffic associated with the project will have a significant impact based on the City's Level of Service criteria and LA County CMP impact criteria.

Existing Year 2002 Conditions

As previously presented in Table 6-XIV-B, three of the four key study intersections currently operate at an adverse service level (LOS 'E' and/or LOS 'F') during the morning and/or evening peak commute hours. The intersections of Santa Fe Avenue at Wardlow Road and Pacific Place at Wardlow Road currently operate at LOS 'E' during the PM peak commute hour. The intersection of Long Beach Boulevard at Wardlow Road currently operates at LOS 'E' during the AM peak commute hour and LOS 'F' during the PM peak commute hour. The remaining key study intersection currently operates at LOS 'D' or better during the AM and PM peak hours.

Year 2004 Future Background Traffic Conditions

An analysis of future (Year 2004) background traffic conditions indicates that he addition of ambient traffic growth and cumulative project traffic will adversely impact three of the four key study intersections. The intersection of Santa Fe Avenue at Wardlow Road is forecast to deteriorate one service level and operate at undesirable LOS 'E' during the PM peak hour. The intersection of Pacific Place at Wardlow Road is forecast to continue to operate at undesirable LOS 'E' during the PM peak hour. The intersection of Long Beach Boulevard at Wardlow Road is forecast to operate at undesirable LOS 'F' during the AM and PM peak hour. The remaining key study intersection is forecast to operate at LOS 'D' or better during the AM and PM peak hours with the addition of ambient traffic growth and cumulative project traffic.

Year 2004 With Project Traffic

Review of Columns 3 and 4 of Table 6-XIV-E shows that traffic associated with the proposed Self-Storage Facility will *not* have a significant impact on any of the four key study intersections, when compared to the City of Long Beach LOS standards and significant traffic impact criteria. The intersections of Santa Fe Avenue at Wardlow Road, Pacific Place at Wardlow Road, and Long Beach

Table 6-XIV-D

RELATED PROJECTS TRAFFIC GENERATION FORECAST¹ Self-Storage Facility, Long Beach

Case	Project Description /	Daily	AN	M Peak H	Iour	PN	PM Peak Hour			
No. ²	Address	2-Way	In	Out	Total	In	Out	Total		
0012-14	N.L.B. Police Station (98 Additional Emp) 4891 Atlantic Avenue	980	25	23	48	41	57	98		
0102-02	Medical Office Building (105,800 SF) 2702 Long Beach Blvd	3,823	205	52	257	105	282	387		
0104-19	Retail/Fast-Food (7,000 SF/1,500 SF) ³ 3400 Long Beach Blvd	940	23	22	45	22	21	43		
0109-01	Retail/Fast-Food (16,760 SF/2,174 SF) ⁴ 3918-3926 Long Beach Blvd	1,863	46	41	87	33	34	67		
0112-16	Pharmacy W/Drive-thru (11,550 SF) ⁵ 3570 Atlantic Avenue	916	18	13	31	30	31	61		
0208-04	Retail (5,750 SF) ⁶ 1422 W. Willow St.	222	4	2	6	7	7	14		
0208-13	Self-Storage Facility (26,000 SF) 3401 Golden Avenue	65	2	2	4	3	3	6		
0208-15	Medical Office Building (7,200 SF) 2760 Atlantic Avenue	260	14	4	18	7	19	26		
0209-17	Retail (5,800 SF) ⁷ 4085 Atlantic Avenue	224	4	2	6	7	7	14		
	Home Depot Center (City of Signal Hill) ⁸ Atlantic/Spring/I-405	10,696	263	222	485	433	458	891		
	ated Projects Trip on Potential	19,989	604	383	987	688	919	1,607		

Pass-by reduction factors:

• Retail: 10% (Daily) and 34% (PM Peak Hour)

- Retail: 10% (Daily) and 34% (PM Peak Hour)
- Fast-Food W/Drive-Thru: 10% (Daily), 49% (AM Peak Hour) and 50% (PM Peak Hour)

- Pharmacy W/Drive-Thru: 10% (Daily) and 49% (PM Peak Hour)
- Pass-by reduction factors:
 - Retail: 10% (Daily) and 34% (PM Peak Hour)
- Pass-by reduction factors:
 - Retail: 10% (Daily) and 34% (PM Peak Hour)

Source: Trip Generation, 6th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (1997).

Source: City of Long Beach Major Projects List (November 2002).

Source: Trip Generation Handbook, ITE October 1998.

[•] Fast-Food W/Drive-Thru: 10% (Daily), 49% (AM Peak Hour) and 50% (PM Peak Hour)

Pass-by reduction factors:

⁵ Pass-by reduction factors:

Source: Signal Hill Home Depot Traffic Impact Analysis prepared by Urban Crossroads (December 2000).



Table 6-XIV-E

YEAR 2004 PEAK HOUR INTERSECTION CAPACITY ANALYSIS Self-Storage Facility, Long Beach

Key Intersections	Time	(1 Year Existing Condi	2002 Traffic tions	Year Backg Tra Condi	2) 2004 ground affic tions ¹⁴	(3 Year Tra Condition Project	ffic ons with Traffic	(4) Project Ir Significa	nce ¹⁵	(5 With I Improv	roject ements
- 4.0 T	Period	ICU	LOS	ICU	LOS	ICU	LOS	ICU Inc.	Y/N	ICU	LOS
1. Santa Fe Ave at	AM	0.785	C	0.809	D	0.809	D	0.000	N		
Wardlow Road	PM	0.971	E	1.011	F	1.012	F	0.001	N		
2. Magnolia Ave at	AM	0.664	В	0.695	В	0.712	С	0.017	N		
Wardlow Road	PM	0.804	C	0.842	D	0.869	D	0.027	N		
3. Pacific Place at	AM	0.828	D	0.854	D	0.862	D	0.008	N		
Wardlow Road 16	PM	0.916	E	0.944	E	0.950	E	0.006	N		
4. Long Beach Blvd	at AM	0.999	E	1.054	F	1.059	F	0.005	N		
Wardlow Road	PM	1.091	F	1.158	F	1.166	F	0.008	N		

Represents anticipated operating conditions with the addition of ambient traffic growth calculated at 2.0% per year to the Year 2004 and related projects traffic.

Significant project impact is defined as a 0.020 or greater increase in ICU value or a 2% increase in delay at a location where the final LOS is E or F.

Please note that the level of service at this key study intersection takes into account the delay motorists experience by the Blue Line light rail transit crossing located immediately east of the intersection.

Boulevard at Wardlow Road are projected to operate at undesirable LOS 'E' and/or 'F' during the AM and/or PM peak hours. However, the project is expected to add less than 0.8% to the ICU values of the three signalized intersections. As discussed earlier, a significant project impact occurs when the project increases traffic demand at a study intersection by 2% of capacity (ICU ≥ 0.020) or adds 2% more delay, causing or worsening LOS 'E' or 'F' conditions.

PROJECT SPECIFIC IMPROVEMENTS

The results of the intersection capacity analyses summarized in Table 6-XIV-E indicates that the proposed Self-Storage Facility project is not expected to have a significant impact at any of the four key study intersections. Therefore, no project-specific mitigation measures at the four key study intersections are required of this project.

SITE ACCESS

As mentioned previously, primary access to the proposed Self-Storage Facility project is provided via a "full access" driveway along Wardlow Road. Level of Service calculations were performed at this location to determine the delay for vehicles waiting to turn left or right out of the project site assuming a one-way stop. Table 6-XIV-F presents the delay experienced by each movement at the proposed project driveway and the resultant level of service for the AM and PM peak hours. Review of Column 1 of Table 6 shows that the proposed project driveway is forecast to operate at LOS 'A' during the AM and PM peak hours. However, review of the delay experienced by each movement shows that vehicles waiting to turn out of the project site experience delays of 31.8 seconds/vehicle (LOS 'D') during the AM peak hour and 180.0 seconds (LOS 'F') during the PM peak hour.

Based on the delay experienced by vehicles waiting to turn out of the site, the traffic consultant has recommended the installation of a two-phased traffic signal at the proposed project driveway. Review of Column 2 of Table 6 shows that the proposed project driveway is forecast to operate at LOS 'A' during the AM peak hour and LOS 'B' during the PM peak hour with the installation of a two-phased traffic signal. Please note that the forecast traffic volumes during the weekday PM peak hour at the proposed project driveway marginally warrant the installation of a traffic signal. Appendix B contains the traffic signal worksheets used to evaluate the necessity of a traffic signal at the proposed project driveway on Wardlow Road.



Table 6-XIV-F

YEAR 2004 PEAK HOUR INTERSECTION CAPACITY ANALYSIS FOR THE PROPOSED PROJECT DRIVEWAY

Self-Storage Facility, Long Beach

			Year 2004 Traffic Conditions With Project T (1) One-Way Stop ¹⁷				raffic (2) 2Ø Traffic Signal			
			Eastbound Left		Southbound Left/Right		Intersection		Intersection	
Ke	y Intersection	Time Period	HCM Delay	LOS	HCM Delay	LOS	HCM Delay	LOS	ICU	LOS
1.	Project Driveway at Wardlow Road	AM PM	10.0 s/v 10.3 s/v	B B	31.8 s/v 180.0 s/v	D F	0.58 s/v 4.47 s/v	A A	0.431 0.669	A B

¹⁷ Source: Highway Capacity Manual 2000, Chapter 17 (Unsignalized Intersections).

TRAFFIC SIGNAL PROGRESSION ANALYSIS

To evaluate the potential traffic impact associated with a new signal on Wardlow Road, a traffic signal progression analysis of eastbound and westbound traffic along Wardlow Road, between the proposed Self-Storage Facility project driveway and Long Beach Boulevard, was conducted using the *Synchro 5.0* traffic analysis software. This progression analysis investigates the coordination/progression impacts on Wardlow Road based on the proposed installation of a traffic signal at the Self-Storage Facility project driveway, located approximately one-quarter (½) mile west of the Magnolia/Wardlow intersection.

The following two (2) scenarios have been evaluated for both the AM and PM peak hours:

- 1. **Scenario 1:** Year 2004 Traffic Conditions with Project Traffic *Unsignalized* project driveway
- 2. **Scenario 2:** Year 2004 Traffic Conditions with Project Traffic Signalized project driveway

Please note that Scenario 2 assumes that a two-phase traffic signal will be installed at the project driveway (i.e., permissive eastbound left-turns.)

SNYCHRO 5.0 METHOD OF ANALYSIS

Synchro 5.0 developed by Trafficware, is typically utilized for modeling and optimizing traffic signal timings. Synchro 5.0 analyzes intersection capacity, as well as progression/coordination operations along an arterial street. The program can simulate existing traffic signal timings and/or optimize proposed signal timings.

Synchro 5.0 implements the methods of the Highway Capacity Manual (HCM 2000) and Webster's formula to calculate intersection delays. Synchro 5.0 also provides a new method for calculating intersection delays called the Percentile Delay Method. This method provides key benefits over Webster's formula, used by the Highway Capacity Manual, as it is able to model the following situations:

- Signals in coordination
- Actuated and semi-actuated signals
- Near saturated and super saturated signals

In a coordinated arterial network, *Synchro 5.0* explicitly calculates the progression factor and the effects of coordination.

To optimize traffic progression along an arterial street, *Synchro 5.0* optimizes cycle lengths, splits, and offsets to reduce vehicular delays. This makes *Synchro's* timing plans similar to *TRANSYT*, which optimizes to reduce stops and delays. *PASSER-II* 90 and other arterial software optimize to maximize the arterial bandwidth.

As such, utilizing the calculated cycle lengths, green splits, phase sequences, and coordination offsets, *Synchro 5.0* produces generated solutions with minimal delays and good arterial progression for the given geometric, traffic, and signal control conditions. The generated progression solutions are typically evaluated based on the following measures of effectiveness**:

- Band A/B: The "A" and "B" direction bandwidths (in seconds) indicate the
 period of time available for traffic to flow in the northerly and southerly
 directions, respectively, within the band from one end of the arterial to the
 other intersections.
- **Efficiency:** The average fraction of the cycle used for progression, ranging from 0.00 to 0.50. Acceptable values for a desirable progression should normally be greater than 0.25. Efficiency is calculated based on the following formula:
 - Efficiency = (Band A + Band B) / (2 * Cycle Length)
- Attainability: The average fraction of the minimum through movement greens used for progression. The value can range from 0.00 through 1.00. Acceptable values for a desirable solution should normally be greater than 0.90. Attainability is calculated with the following formula:
 - Attainability = (Band A + Band B) / (Green A_{min} + Green B_{min})

Tables 6-XIV-G and 6-XIV-H summarize the measures of effectiveness criteria, as detailed above.

Intersection Capacity Analysis

Table 6-XIV-I summarizes the peak hour Level of Service results, based on *Synchro's* Percentile Delay methodology, at the four key study intersections for future traffic conditions with and without a traffic signal at the proposed project driveway. The first column (1) of values in Table 6-XIV-I presents a summary of Year 2004 AM and PM peak hour traffic conditions with project traffic and



Table 6-XIV-G

EFFICIENCY CRITERIA FOR PROGRESSION [1] Self-Storage Facility, Long Beach

Efficiency	Description
0.00 - 0.12	Poor Progression
0.13 - 0.24	Fair Progression
0.25 - 0.36	Good Progression
0.37 – 1.00	Great Progression

Notes: [1] Source: PASSER II-90 Program User's Guide (June 1991, Texas Transportation Institute).



Table 6-XIV-H

ATTAINABILITY CRITERIA FOR PROGRESSION [1] Self-Storage Facility, Long Beach

Attainability	Description				
1.00 – 0.99	Increase Minimum Thru Phase				
0.99 – 0.70	Fine Tuning Needed				
0.69 – 0.00	Major Changes Needed				

Notes: [1] Source: PASSER II-90 Program User's Guide (June 1991, Texas Transportation Institute).

assumes no traffic signal at the project driveway (i.e., Scenario 1). The second column (2) of values in Table 6-XIV-I presents a summary of Year 2004 AM and

Table

PM peak hour traffic conditions with project traffic and assumes that a traffic signal is controlling traffic at the project driveway (i.e., Scenario 2).

Review of columns 1 and 2 of Table 6-XIV-I indicates that the three off-site study intersections (i.e., Wardlow/Magnolia, Wardlow/Pacific Place, Wardlow/Long Beach) will operate at the same service levels with or without a traffic signal at the project driveway. However, at the proposed project driveway, the installation of a traffic signal will significantly improve the operations of the southbound turning movements. The delay for southbound motorists will decrease by 6.8 seconds and 181.7 seconds during the AM and PM peak hours, respectively, which will improve safety conditions at the project driveway.

Progression Analysis Results

Table 6-XIV-J summarizes the peak period progression analysis results for Year 2004 traffic conditions with project traffic. Efficiency and Attainability values are reported in columns (1) and (2) respectively, while columns (3) and (4) report the respective bandwidths for the eastbound and westbound directions.

As shown for Year 2004 traffic conditions without a traffic signal at the project driveway (i.e., row 1), traffic signal progression is "fair" and "good" in both the eastbound and westbound directions during the AM and PM peak hours, respectively, according to the efficiency values. The bandwidths during the AM peak period were found to be 15 seconds and 26 seconds in the eastbound and westbound directions, respectively. During the PM peak hour, the bandwidths were 34 seconds and 28 seconds in each respective direction of travel.

Similar to Scenario 1 results, future conditions with the proposed traffic signal (i.e., Scenario 2) are forecast to provide "fair" and "good" progression in both the eastbound and westbound directions during the AM and PM peak hours, respectively. All measures of effectiveness and attainability were found to be similar to conditions without a signal, with no significant differences. In addition, eastbound and westbound bandwidths will continue to provide sufficient green times. Therefore, traffic progression along Wardlow Road is forecast to be unaffected by the installation of the proposed traffic signal, as the efficiency, attainability, and band widths will remain unchanged and/or slightly degrade by an insignificant amount.



Table 6-XIV-I

SYNCHRO PEAK HOUR INTERSECTION CAPACITY ANALYSIS¹⁹ Self-Storage Facility, Long Beach

Key Intersections			(1) Year 200 Traffic Conditi Project (Unsignali Project Drive	ons with zed	(2) Year 2004 Traffic Conditions with Project (Signalized Project Driveway)		
		Time Period	Delay (sec/vehicle) ²⁰	LOS	Delay (sec/vehicle ²⁰	LOS	
1.	Wardlow Road at	AM	0.7 / 36.8	B/E	1.9 / 30.0	A/C	
	Project Driveway	PM	5.3 / 211.9	A/F	4.0 / 30.2	A/C	
2.	Wardlow Road at	AM	14.8	В	14.1	В	
	Magnolia Avenue	PM	16.4	В	14.2	В	
3.	Wardlow Road at	AM	17.3	В	17.2	В	
	Pacific Avenue	PM	17.2	В	17.0	В	
4.	Wardlow Road at	AM	45.2	D	45.1	D	
	Long Beach Boulevard	PM	63.4	E	62.9	E	

Source: Synchro 5.0, Percentile Delay Methodology.

Delay at the project driveway is reported for the overall intersection, as well as the southbound approach (i.e., overall intersection / southbound approach).



Table 6-XIV-J

SYNCHRO 5.0 MEASURES OF EFFECTIVENESS SUMMARY Self-Storage Facility Project, Long Beach

Scenario Description	Time Period	(1) Efficiency	(2) Attainability	(3) Eastbound Bandwidth (seconds)	(4) Westbound Bandwidth (seconds)
1. Year 2004 Traffic with Project	AM	0.23	1.00	15	26
(unsignalized project driveway)	PM	0.34	1.00	34	28
2. Year 2004 Traffic with Project	AM	0.23	1.00	15	26
(signalized project driveway)	PM .	0.30	1.00	34	20

 $n:\ 2300\ 2022396\ Table\ 4\ Progression\ Summary.xls$

Anticipated Impacts

This section evaluates the estimated traffic that would be generated by the proposed project during site preparation and construction activities, as well as project operation, and any possible impacts that the project may have on the area circulation system. Impacts are examined under several scenarios addressing existing and projected future conditions. These scenarios are examined to account for other known and reasonably foreseeable development that could contribute to impacts to the circulation system throughout the life of the project. Scenarios analyzed include: 'Existing Conditions plus other Approved Projects plus Proposed Project Conditions', and 'Year 2004 Future Conditions'. Impacts related to project and emergency access, including a signalized and unsignalized project driveway are also examined.

EXISTING CONDITIONS PLUS OTHER APPROVED PROJECTS PLUS PROPOSED PROJECT CONDITIONS

Impact Analysis

Traffic on the roadways near the proposed project site were analyzed with the proposed project trips added to the existing conditions plus the other related projects' traffic volumes. The existing peak hour levels of service, proposed project daily trip volumes and peak hour volumes, and related projects traffic generation forecasts are illustrated in Tables 6-XIV-B, 6-XIV-C, and 6-XIV-D respectively. Table 6-XIV-E presents a summary of ICU values and LOS values for Year 2004 peak hour intersection capacity. As shown in Table 6-XIV-E, the traffic generated by the proposed project would not be enough to lower the LOS at any of the study intersections to an unacceptable level. The proposed project would consequently have a less than significant impact on traffic within the project vicinity.

PROJECT ACCESS

Impact Analysis

The proposed project includes one public access point off of Wardlow Road. This access point is intended to serve the proposed project and the entire site after build-out. Traffic entering and exiting the project site from the Wardlow Road driveway is moderate, with 77 trips produced in the AM peak hour and 134 trips produced in the PM peak hour for the storage facility, while an RV storage facility with up to 650 RV storage spaces is expected to generate 182 daily two-way trips, with 14 trips (7 inbound, 7 outbound) produced in the AM peak hour and 20 trips (13 inbound, 7 outbound) produced in the PM peak hour during a typical weekday.

Review of the lower portion of Table 6-XIV-C shows that on a typical weekend, the proposed project is expected to generate 1,202 daily two-way trips, with 206 trips (103 inbound, 103 outbound) produced in the weekend peak hour. The temporary RV storage use can be expected to generate 163 weekend daily trips, with 26 trips (13 inbound, 13 outbound) produced in the weekend peak hour.

Based on the delay experienced by vehicles waiting to turn out of the site, the traffic consultant has recommended the installation of a three-phased traffic signal at the proposed project driveway. Review of column (2) of Table 6-XIV-F shows that the proposed project driveway is forecast to operate at LOS 'A' during the AM peak hour and LOS 'B' during the PM peak hour with the installation of a three-phased traffic signal. Please note that the forecast traffic volumes during the weekday PM peak hour at the proposed project driveway marginally warrant the installation of a traffic signal. Appendix C contains the traffic signal worksheets used to evaluate the necessity of a traffic signal at the proposed project driveway on Wardlow Road.

Based on the traffic consultant's analysis, it is concluded that traffic signal progression and intersection operating conditions will not be adversely impacted (if at all) as a result of the implementation of a traffic signal at the proposed project driveway. In addition, a traffic signal at the proposed project driveway will improve safety and access opportunities at the study intersection. Therefore, it is recommended that a three-phase (i.e., permissive eastbound left-turns) be installed at the proposed project driveway on Wardlow Road.

RESULT IN INADEQUATE EMERGENCY ACCESS

Impact Analysis

One ingress and egress point is planned to be provided to the project area along Wardlow Road. One emergency access point is planned off of Baker Street, which is near the northern end of the project site at the terminus of Golden Avenue. This emergency access will be gated, with access restricted to emergency vehicles and no public access.

The Long Beach Fire Department, as well as the Long Beach Police Department, have reviewed site plans with respect to access and both have found it to be adequate as proposed with the installation of a traffic signal at the project driveway along Wardlow Road. The additional emergency access point will comply with the requirements of the Long Beach Fire Department. Consequently, emergency access to the project would be adequate. No adverse impacts related to emergency access are anticipated.

CONSTRUCTION RELATED TRAFFIC

Impact Analysis

The proposed project has been analyzed to estimate the potential construction related traffic impacts based upon the same assumptions utilized to assess potential air quality and noise impacts related to construction activities. The construction of the project, as has been described in the Project Description and other sections, will require substantial grading and site preparation in order to accommodate the proposed project. These activities, in addition to the actual construction of the buildings, are estimated to occur in phases over a period of five years or more.

Since there is not anticipated to be any cut and/or fill operations requiring the import or export of soil, there will be no truck trips associated with this component of the grading operation. All earthmoving equipment (graders, loaders, etc.) is anticipated to remain on-site during grading operations, minimizing the impact of maneuvering heavy equipment on streets within the project vicinity.

Since the project is to be developed in phases over time, the construction phase of the project will only involve limited portions of the total project site at any one time.

Mitigation Measures

- XIV-1 Applicant shall install Wardlow Road access infrastructure prior to project construction.
- XIV-2 Applicant shall provide an exclusive westbound right-turn lane into the project site along Wardlow Road. It is recommended that the right-turn pocket have a minimum storage length of 100 feet with a 120 foot transition area.
- XIV-3 Applicant shall modify the existing median and provide an eastbound left-turn lane into the project site along Wardlow Road. It is recommended that the eastbound left-turn pocket have a minimum storage length of 100 feet with a 120-foot transition area.
- XIV-4 Applicant shall install a three-phased traffic signal at the proposed project driveway along Wardlow Road.

Cumulative Impacts

No cumulative impacts are anticipated for this project with respect to traffic and transportation.

Unavoidable Significant Impacts

With implementation of the proposed mitigation measures, there are not anticipated to be any unavoidable significant impacts with respect to traffic and transportation.

XV. UTILITIES / SERVICE SYSTEMS

Existing Setting

The project site is located in an urban setting and, as such, has access to and is served by existing utilities. The utility providers are as followers: the City of Long Beach for water and sewer, Southern California Edison for electricity and Southeast Resource Recovery Facility for solid waste.

Anticipated Impacts

The proposed project, a self-storage facility to be constructed in four phases, would have an increased demand upon utilities beyond what is presently on the project site. The impacts, however, would not be expected to be significant. Electricity would be utilized throughout the facility and water would be utilized in certain buildings and for washing down the impervious surfaces. The existing sewer would be adequate to accommodate the single dwelling unit proposed at the facility as well as the restrooms for self-storage customers. The solid waste requirements would not be excessive.

The demands for each utility would increase as each phase of the facility is completed. With respect to CEQA, the proposed project would not result in the need for any new facilities. This would include water, wastewater and solid waste.

Mitigation Measures

None are required. XV-1 Prior to the issuance of grading permits, the applicant must obtain a "buildover" permit from the Los Angeles County Sanitation Distict.

Cumulative Impacts

None are anticipated.

Unavoidable Significant Impacts

None are anticipated.

ALTERNATIVES

The California Environmental Quality Act requires that all Environmental Impact Reports include a discussion and comparison of potential alternatives to the proposed project that could feasibly achieve similar objectives. The discussion and analysis should focus on potential alternatives that may be able to reduce some or all of the significant adverse impacts associated with the proposed project to a level of insignificance.

At an early stage, alternative sites were considered. The principle considerations for alternative sites included the following criteria among others:

- To meet the demand within the area for neighborhood selfstorage facilities
- To redevelop a presently blighted parcel of land with development constraints to an economically viable and more attractive use
- To convert a former incompatible industrial use to one that is more compatible with the adjacent neighborhood
- To create a development that will not pose a health hazard to the surrounding neighborhood
- To provide a transitional buffer between the residential neighborhood to the East, and the Long Beach Freeway (I-710), the Los Angeles River, and the San Diego Freeway (I-405) to the West and North.

Because the City of Long Beach is nearly built out, there are very few vacant sites of this size available. One of the sites that was considered as a possible alternative site is the Alamitos Ridge site. This site is bordered by Redondo Avenue, on the south, by 20th Street, on the west by Obispo Avenue, and on the north by a future school site. This site is currently vacant and is approximately 14 acres in size.

The Alamitos Ridge site was considered, however it is not large enough, being 14 acres, whereas the proposed site is approximately 20 acres. In addition, it is held as private property as is the proposed project site. Consequently, this alternative to the EIR was not considered to be reasonably feasible or desirable and was therefore not considered further.

The following alternatives are considered herein:

Alternative 1: No project/No Development

Alternative 2: Light Industrial Development

Alternative 3: Passive Park

Alternative 4: No project/Implementation of the Existing General Plan

Alternative 1 – No project/No Development

Consideration of this alternative is mandated under the California Environmental Quality Act.

This alternative would leave the project site in its present undeveloped condition (a partially vacant lot formerly used as for oil separation). This alternative supposes that no development or specific use of the property would occur, regardless of zoning, General Plan designation, or other prior determinations made by the City. Under this alternative, the project would not proceed. As has been stated, the site is currently vacant. The current blighted conditions would continue, however Basin 1 would be remediated as ordered by the Long Beach Health Department..

Summary of Environmental Impacts Alternative 1

Environmental Analysis

The No Project/No Development Alternative would not implement the City's General Plan designation for development on the project site. In leaving the site in its current undeveloped condition (a partially vacant lot formerly used for separation of oil products from water), all physical impacts associated with the proposed project would not be generated by the proposed site uses, the current views of the site would remain the same, and no topographic, hydrologic, or land use changes would occur. This alternative would not generate the need for additional public services and utility consumption as would the project.

Conclusion

This alternative would not result in any physical environmental effects. Maintenance of the site in its existing vacant condition would reduce impacts to physical resources, including impacts to earth resources, and visual resources. In comparison to the proposed project, it would eliminate significant impacts to short-term air quality, in particular dust of PM_{10} emissions, associated with project construction. In addition, the interim construction noise would be eliminated.

However, this alternative would result in eliminating opportunities to provide commercial storage and RV parking, as the site is currently zoned. In addition,

the parcel would remain undeveloped and contaminated for a longer period of time.

Regardless of the outcome of the proposed project application, the project site is likely to be developed in the future, as it is one of the few remaining vacant land parcels within the City. The General Plan and Zoning Code designate the site for development. The site is a potential infill site, with adequate infrastructure and community services for future development. Therefore, the No Project/No Development Alternative is realistically an interim use of the site, with some environmental effect to take place in the future.

Alternative 2- Industrial Development – Office Warehousing

Under this alternative, the site would be redeveloped to a light industrial use. Such a use would require a Rezoning from CS to IL and a General Plan amendment from LUD-1 to LUD 9R. The existing zoning "CS" only allows self-storage, which is the least impacting light industrial use allowed by LUD-9R, Light Industrial.

This alternative considers that the site develop as a typical light industrial use, which is warehousing with associated office. This type of use would have a greater impact to the surrounding community, as it generates more traffic, has a height limit of 60 feet, and would create more noise during operation.

Summary of Impacts Alternative 2

Aesthetics

The warehousing with associated office would result in a building bulk, mass and height, which are not compatible with the adjacent residential neighborhoods. Significant adverse impacts are anticipated.

Air Quality

Warehousing and office represents a significant increase in vehicular trips and truck trips to the site. Depending on where access to the site is taken, the air quality for the adjacent homes could adversely affected if access is taken from Baker Street. Adverse impacts are anticipated.

Hazards and Hazardous Conditions

In order for any construction project to take place at the site, the site must be remediated to at least the RWQCB standards. No change expected.

Land Use and Planning

Such a use will require both a General Plan Amendment and Rezoning. The use is generally considered to be a more intense than the proposed project and would not be as compatible with the adjacent neighborhoods. Significant impacts are anticipated.

Noise

This alternative will be active all day long and will have more employees at the site, making more vehicle trips. This use is typically more impacting that self-storage and is expected to have more significant impacts.

Population and Housing

Similar to the proposed project, this use will preclude housing on site.

Transportation

This alternative would generated more trips than the proposed use. In addition, the access may not occur from Baker Street, thus sending business use trips through the adjacent neighborhood. Significant impacts are anticipated.

Alternative 3- Passive Park

Many people are concerned about the use of the project site. Many suggestions at the scooping meeting were made regarding limiting the use of this site to a passive park.

If this were the case, the owner of the property would need to change the zoning and General Plan designations to park, losing development value of its privately held property. In addition, this use would not ensure that the site was completely remediated to RWQCB standards.

The proposed project will have a person on-site at all times and the facility will be continually monitored. A passive park will result in less surveillance of the site and because of the remote nature of the site, police services may be impacted.

Summary of Impacts Alternative 3

Aesthetics

This alternative could affect the amount of remediation required at the site and could remain in a blighted state for a longer period of time. It would not be visually screened from the adjacent neighborhood. Increase impacts could result.

Air Quality

This alternative would cause less air quality impacts during the construction phase and the operational phase, as fewer trips are likely to be generated by a passive park. Beneficial Impacts anticipated.

Hazardous and Hazardous Conditions

Site remediation would be necessary to the same standards as the proposed project. Impacts Neutral.

Hydrology and Water Quality

Because the site is currently vacant and slopes westward, a passive park would not alter the existing drainage pattern of the site. However, the site would likely create more surface runoff than the proposed project as the proposed project would be constructed to comply with NPDES. More significant impact expected.

Land Use

This alternative would require both a zone change and General Plan amendment. However, it would be compatible with the adjacent residential and the adjacent regional bikeway located on the LA River to the west of the site. Less impacts expected.

Noise

This alternative would not provide a noise buffer from the I-710 and the I-405, to the adjacent neighborhood. However, construction noise from this alternative would be less that from the proposed project. From an operational standpoint, self-storage is known as a "quite-use", noise impacts would be more significant. Less impacts expected.

Population and Housing:

This alternative would preclude dwellings and population. With an average lot size of 6,000 square feet, approximately 138 homes could be built according to the General Plan designation currently on the site. Adverse impacts are anticipated to Long Beach Housing.

Public Services

This alternative could add to police services needed at the site, due to the remote nature of the site. Increase impacts expected, as the proposed project will incorporate crime prevention design techniques and lighting. In addition the site will be fenced with security devises installed.

Recreation

This alternative would create additional park space. The City's Open Space and Recreation Element's goal for the City is having 8 acres of Parkland for every 1000 residents. The west-side of Long Beach is considered deficient in parkland according to this policy and would benefit from this alternative. Less impacts anticipated.

Transportation

While a passive park use would not generate as many trips as an active park use, it would generate some. These trips would be added to the roadway of the adjacent neighborhoods. Some additional impacts expected.

Alternative 4- No Project/General Plan Designation

The General Plan designation on the subject site is LUD – 1, allowing the development of single-family dwellings. Overall it would accomplish most of the goals of the proposed project, site remediation and revenue to the property owner. However, this alternative would require a zoning change from CS to R-1-N. Based on a 6,000 square foot lot size, this alternative could provide 138 number of new housing units.

Summary of Impacts Alternative 4

Aesthetics

Residential development would be compatible with the existing adjacent neighborhood. Beneficial impacts expected.

Air Quality

Construction of residential units would likely produce the same amount of dust in the air as the proposed project. However, because of the number of vehicular trips produced by housing, operationally there would be more air pollutants produced than the proposed project. Adverse impacts are anticipated to air quality.

Hazards and Hazardous Materials

The construction of single-family homes could require more remediation than the proposed project. Normally, site remediation is done according to RWQCB standards and then a Health Risk Assessment study is done. However, on this site because the main constituents of concern are petroleum products, there is usually no additional remediation required.

No Significant adverse impacts are anticipated

Hydrology and Water Quality

Single-family homes would produce more storm water run-off and will produce more wastewater than the proposed project. Adverse impacts anticipated.

Land Use and Planning

Under this alternative, the General Plan would be followed and would increase the housing supply for the City as called for by the Housing Element. Single-family housing would be compatible with the adjacent neighborhood, however, would not be compatible with the adjacent freeway system. Adverse impacts are anticipated.

Noise

This alternative would produce similar amounts of noise and disturbance during construction as would the proposed project. Again, because self-storage is a "quiet use", it would produce less operational noise from people and vehicles. Significant adverse impacts are anticipated.

Public Service

This alternative would use much many public service resources, than self-storage. The homes would require increased fire protection, police protection, schools, parks and library services. Significant adverse impacts are anticipated.

Recreation

This alternative would produce a need for more park space, based on the Open Space and Recreation Element's goal of the City having 8 acres of parkland for every 1,000 people. Significant impacts are expected.

Transportation

This alternative would result in additional vehicular trip traffic. In addition, access for this type of development would occur at Baker Street, thus adding these trips to the adjacent neighborhood. Significant impacts are expected.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Section 15126.6(e)(2) of the CEQA Guidelines indicated that an analysis of alternatives to a proposed project shall identify and environmentally superior alternative among the alternatives evaluated in the EIR. The Guidelines also state that should it be determined that the No Project Alternative is the environmentally superior alternative, the EIR shall identify another environmentally superior alternative among the remaining alternatives.

A comparative summary of the environmental impacts anticipated under each Alternative should consider which alternative has the least significant impacts. A comparison of the above described Alternatives demonstrates that the proposed project has the least number of significant or potentially significant impacts.

- 1. The No Project/No Development Alternative would not be the environmentally superior alternative because the project site would not be remediated in the near-term. The proposed project would ensure that the entire site is remediated to standards set by the Regional Water Quality Control Board, before development occurs. In addition, this alternative would not provide a block wall noise buffer or landscape along Golden Avenue.
- 2. The Light Industrial Alternative would not be the environmentally superior alternative because it would create more potentially significant impacts than the proposed project. This use would generate more noise because of the nature of the operation. In addition, office workers and trucks traffic would increase and with access from Baker and Golden, these trips would go through the adjacent neighborhood. Short-term construction noise and air quality would be roughly equivalent, however, operational impacts associated with this alternative are more significant.
- 5. The Passive Park Alternative would not be the environmentally superior alternative because of the following reasons. While short-term impacts would be reduced, long-term traffic in the adjacent neighborhood would increase, along with noise from the use as it would not be bordered by a block wall. In addition, public services could be impacted by increased police calls because of the remoteness of the site. The proposed project will have surveillance and security measures required. Also, the timing of remediation of the entire site would be uncertain, which is potentially significant.
- 6. The No Project/Implementation of the Existing General Plan would not be the environmentally superior alternative because of the following reasons. Short-term construction noise and air quality would be roughly equivalent, however, operational impacts associated with this alternative are more

significant. Residential projects also use more water and generate wastewater, noise, and traffic.

Because of the above comparison discussion, the proposed project is considered the environmentally superior project.

Significant Irreversible Environmental Change Which Would Be Involved in the Proposed Project Should It be Implemented

The development of the 20 acre site into a self-storage use, and the change in General Plan designation to a land use that allows commercial self-storage, is an irretrievable commitment of the land and resources as commercial storage, thus eliminating the future possibility of housing.

GROWTH INDUCING IMPACTS

In general, a proposed project may foster economic, population, housing or related growth in a geographic area if it meets one of the three criteria identified below:

- 1. Generates economic growth or expansion, either directly or indirectly (e.g. changes in revenue base, employment expansion or construction activity).
- 2. Establishes a precedent setting action (e.g. an innovation, a radical change in zoning or general plan amendment approval).
- Develops or encroaches upon an isolated or adjacent area (being distinct from an "infill" project being developed in an urbanized and built-out environment,

Should a project meet any one of the criteria listed above, it can be considered as growth inducing. The potential, growth-inducing impacts of the proposed project are evaluated below with regard to the three growth inducing criteria listed above.

1. Economic Growth:

The proposed self-storage project will likely not spur economic activity in the City, as it provides very few job opportunities. However, the proposal will generate construction activity, which will result in short-term jobs at the site. Taxable sales from self-storage facilities are minimal when compared to other retail and industrial uses.

2. Precedent Setting Action:

The proposed General Plan Amendment change will permanently eliminate the potential of residential dwellings being installed on the site.

3. Encroaches upon an isolated area:

The proposed site is an isolated, transitional site. However, the proposed use is that of a self-storage site and is considered to be an in-fill project, as Long Beach is a built-out City. Such land usage is not known to generate urban growth in an area already fully developed. It will serve the community in which it is located.

⁷ Ibid.

⁶ City of Long Beach Self-Storage Study, April 2003.

ORGANIZATIONS AND PERSONS CONSULTED

This section presents a list of individuals who were consulted in the preparation of this Environmental Impact Report.

Community Members – Scoping Meeting (please see Exhibit 10-1 for a list of CEQA concerns brought up at the Scoping Meeting, which occurred on March 12, 2003. All neighborhood concerns were considered in the environmental analysis in this document.

Gewan DeLaura Linda Enderfinla Richard Gutmann Kathryn Gutmann Mike Kowal Jeanne Hoffman A. Pettigrew Darren & Suzie Forbes Steven Chast **Dendall Rainwater** Richard Wartholomew Richard Hojaboom Kevin Murphy Roger Vittow Dixie Williams Bill Hand Cary & Carol Ugolini Jose & Elvira Jauregu

The following items were raised as issues of concern to the community at the scoping meeting of March 12, 2003.

- Environmental Remediation of the project site.
- Traffic safety with regard to the proposed project access from Wardlow Road.
- Project security issues and potential impacts to the adjacent residential neighborhood.
- Visual/Aesthetic impacts to the adjacent residential neighborhood-Including building height and massing, building architecture, potential impacts from project security lighting, etc.
- Loss of potential open space/parkland with project development.
- Increase in traffic along neighboring streets with project development.
- Effectiveness of landscape buffer/wall along Golden Avenue separating the project site from the residential neighborhood.

City of Long Beach
City Attorney's Office
Energy Department
Fire Department
Gas Department
Health and Human Services
Parks, Recreation and Marine Department
Planning and Building Department
Police Department
Public Works Department
Water Department

Los Angeles County

County of Los Angeles Fire Department
County Sanitation Districts of Los Angeles County
Department of Public Works
Department of Health Services
Sanitation District

Regional

South Coast Air Quality Management District Southern California Association of Governments

State of California

Governor's Office of Planning and Research Department of Toxic Substances Control California Regional Water Control District California Integrated Waste Management Board Department of Transportation

Consultants

Linscott, Law, and Greenspan Brycon, LLC Miller Brooks Environmental, Inc. Geotech

MITIGATION MONITORING PLAN

MITIGATION MONITORING PLAN DRAFT ENVIRONMENTAL IMPACT REPORT PROPOSED SELF-STORAGE FACILITY 712 W. BAKER STREET

I. AESTHETICS

- I-1 All exterior security lighting shall be screened in such a way that it does not spillover into adjacent properties and shall be placed or mounted in such a way that it is not directly visible from the I-710 north to I-405 south transition road, and also from Wardlow Road.
- I-2 All lighting along Golden Avenue and adjacent to residential areas shall be of a type, design, and intensity compatible with existing neighborhood lighting.
- I-3 Construction contractors shall use non-glare, directional lighting to minimize potential light and glare impacts when lights are necessary for nighttime safety and security in the construction area.
- I-4 The proposed security/screening wall separating the landscaped area on the eastern boundary of the project site with the remainder of the project site, shall be constructed prior to any building construction, or grading related to building construction, to minimize the adverse aesthetic impact of project construction.

II. AIR QUALITY

II-1 Prior to the issuance of any grading permits, the Applicant shall prepare a Fugitive Dust Emission Control Plan in compliance with SCAQMD Rule 403. The plan shall identify methods to control fugitive dust through implementation of reasonable available control measures in sufficient frequencies and quantities to prevent visible emissions from crossing the property lines of the proposed facility. Provisions of the plan shall include the stipulation that all areas of active grading shall be watered at least twice daily and that not more than 10 acres will undergo active grading at any one time. The plan shall also stipulate that disturbed areas at the construction site shall be treated with dust suppressants when activities have ceased for 30 days, as well as two or more of the control techniques identified below:

- (A) Application of non-toxic chemical stabilizers to unpaved roads and vehicle parking areas;
- (B) Application of sufficient water prior to initiating any earth movement;
- (C) Sweeping and/or cleaning streets where vehicles exit construction sites;
- (D) Installation of wheel washers where vehicles exit disturbed surface areas onto paved roads;
- (E) Paving of construction access roads;
- (F) Paving of all roads on a construction site once final elevations have been reached or at the earliest feasible time;
- (G) All stockpiles for material export shall be watered at least twice daily. Stockpiles that may be used for long-term on-site soil storage shall be planted and watered twice daily until such plants take root;
- (H) Any other measures as approved by the Planning Department.
- **II-2** All heavy equipment shall be maintained in a proper state of tune as per the manufacturer's specifications.
- **II-3** Heavy equipment shall not be allowed to remain idling for more than five minutes duration.
- **II-4** Trucks shall not be allowed to remain idling for more than two minutes duration.
- **II-5** Electric power shall be used to the exclusion of gasoline or diesel generators whenever feasible.
- II-6 The applicant shall specify that the contractor use only paints and coatings low in Reactive Organic Gas (ROG) content in order to minimize such emissions and vapors.
- II-7 All paints and coatings shall be applied either using high volume, low pressure (HVLP) spray equipment or by hand application in order to minimize dispersion of vapors and spray.
- II-8 All known and observed hazardous materials will be remediated in accordance with the recommendations included in Section ____(hazards) of this document. If locations where contamination from prior activities or

hazardous materials are discovered during construction activities, these construction activities shall be curtailed until the area is evaluated and remediated as determined appropriate by all regulatory agencies. Removal of petroleum contamination will also alleviate the generation of hydrogen sulfide and its attendant odor. These activities would fall under the direction of any local, regional, and state agencies that would 'sign off' on the remediation effort upon completion.

III. BIOLOGICAL RESOURCES

III-1 Drought-resistant plants shall be incorporated in the new landscaping plan.

IV. CULTURAL RESOURCES

- IV-1 Because the site must be graded, there is a potential for the disturbance of archaeological artifacts. If any archaeological artifacts should be found during excavation, work shall cease and a project Archaeologist shall be retained.
- IV-2 If archaeological test excavations performed by the project Archaeologist reveal archaeological resources (sites, features, or artifacts) deemed unique (as defined by the provisions of California Public Resources Code Section 21083.2(g) by the project archaeological, those resources to be disturbed shall be addressed through scientific archaeological salvage excavations subject to the provisions and limitations of California Public Resources Code Section 21083 (c), (d), and (e)(1).

V. GEOLOGY / SOILS

- V-1 During site preparation, the project area shall be cleared of surface obstructions, existing debris, potentially compressible material and stripped of vegetation. Holes resulting from the removal of buried obstructions shall be replaced with suitable compacted fill material. Areas to receive fill and/or other surface improvements shall be scarified to a minimum depth of 6 inches, brought to a near-optimum moisture condition, and recompacted to at least 90 percent relative compaction as per American Standard of Testing and Materials [ASTM] Test Method D1557.
- V-2 Compressible materials not removed by the planned grading shall be excavated to competent material, and replaced with compacted soils. Recommended depth of remedial grading ranges from 8 to 15 feet with some localized deeper removals deemed necessary, such as 15 feet below existing grade at the base of buried detention basins.

- V-3 In order to address stability of excavations along the perimeter of the site, the grading contractor shall not cut any slopes steeper than 1:1 and the remedial grading shall occur in stages with the total length of excavation that allowed open at one time be limited to a maximum of 100 linear feet. All movement sensitive structures located within the zone of influence during excavation shall be appropriately shored.
- V-4 In general, fill shall be placed in uniform lifts not exceeding 8 inches in compacted thickness with placement and compaction of fill in accordance with local grading ordinances under the observation and testing of the geotechnical consultant.
- **V-5** In general, oversized material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.
- V-6 Any imported soils, if deemed necessary for fill, shall consist of granular soils of very low to low expansion potential (expansion index 50 or less based on UBC 18-2) and contain no materials over 6 inches in maximum dimension.
- V-7 To prevent any damage to utilities, shallow trenches shall use clean sand (sand equivalent (SE) of 30 or greater) to bed and shade the utilities.
- V-8 If the five concrete skimmers are left in place and in-filled, all machinery, debris, and potentially compressible material shall be removed from the concrete tanks prior to backfill. The bottom of the tanks shall be broken and perforated by 4-inch diameter or larger holes spaced approximately 10 feet apart with a minimum of 15 holes per tank to allow for drainage. The upper portions of the concrete tanks shall be removed within 5 vertical feet of finish grade as a minimum and/or at least 3 vertical feet below the base of the proposed utilities. The tanks shall then be backfilled by mechanical means to at least 90 percent relative compaction.
- **V-9** Provisional foundation recommendations, included in the Appendices, shall be implemented depending on foundation type (e.g., conventional footings, post-tensioned foundation, etc.)
- V-10 All foundations shall be setback in accordance with the City of Long Beach Grading Code or the UBC, which ever is more restrictive. Future improvements constructed within the top of slope setback area shall provide a deepened footing or a pier and grade beam foundation to support the improvement with flexibility, or design the improvement to accommodate potential movement.

- V-11 The recommended lateral pressures for approved onsite sand for level or sloping backfill shall be maintained as stated in the LAGI report which is included in the Appendices.
- V-12 Embedded structural walls shall be designed for lateral earth pressures exerted on them. Walls shall be designed for "active", "at-rest" or "passive" conditions as determined by conditions. If conditions other than those arise, the equivalent fluid pressure values shall be provided on an individual case basis by the geotechnical engineer. Refer to the Appendices for wall design considerations.
- V-13 Any surcharge loading effects from adjacent structures on wall structures shall be evaluated by the geotechnical and structural engineers. All retaining wall structures shall be provided with appropriate drainage and waterproofed.
- **V-14** Prior to the commencement of earthwork and grading, the applicant shall meet the specifications for rough grading outlined in LAGI.
- V-15 The applicant shall refer to the LAGI's recommendations for pavement, corrosivity to concrete and metal, nonstructural concrete flatwork, surface water and drainage control.
- V-16 During construction, the interpolated subsurface conditions shall be checked in the field by a representative of Lawson & Associates. Also future grading, excavations, backfill of utility trenches, preparation of pavement subgrade and placement of aggregate base, foundation or retaining wall construction or when unusual soil conditions are encountered on site, construction observation and testing shall be performed by the geotechnical consultant.

VI. HAZARDS & HAZARDOUS MATERIALS

- VI-1 Prior to the release of Grading Permits, Remediation of Basin 1 must be complete and LBDHHS must issue a letter of "No Further Action".
- VI-2 Prior to the release of Grading Permits, the entire site must be remediated to the standards provided by the RWQCB.
- VI-3 All heavy metal contaminated soil must be transported from the site and disposed of by best management practices established by the South Coast Air Quality Management Board and the Department of Transportation.
- VI-4 The applicant must submit an odor and vapor suppression program to the satisfaction of LBDHHS and the SCAQMD.

- VI-5 The applicant is required to provide an on-site monitor to perform monitoring and /or soil and air sampling during grading, trenching, and cut or fill operation, and the monitor shall be allowed inspection of developer's monitoring and testing under the direction of the City of Long Beach to ensure that surface soil conditions, conditions of exposed soils, and air conditions are safe for residents and on-site workers.
- **VI-6** Groundwater monitoring must continue as required by the RWQCB.

VII. HYDROLOGY / WATER QUALITY

- VII-1 Prior to the release of the grading permit, the applicant shall submit a final hydrology plan to the City. The plan shall address all proposed on-site drainage, including all potential daily and storm run-off, methods of proposed discharge, conformance with NPDES, and standards relative to flood control. The plan shall be prepared to the satisfaction of the Director of Public Works.
- VII-2 Prior to the release of the grading permit, the applicant shall demonstrate to the satisfaction of the Director of Planning and Building that all issues relative to the existing Los Angeles County sewer main which travels through the project site have been considered. Such demonstration shall include the appropriate plans and documentation to address the condition of the sewer main, the status of an easement over the sewer main, how the sewer main shall remain accessible and how the proposed development will affect the sewer main.

VIII. LAND USE / PLANNING

- **VIII-1** The City of Long Beach will be required to amend its General Plan to be consistent with the existing zoning designation and proposed land use.
- VIII-2 If the Baker Street right-of-way is incorporated into the proposed project, the right-of-way must be vacated prior to the development of the proposed project.
- VIII-3 The applicant shall meet all applicable development standards outlined in Title 21 of the Municipal Code, or apply for and receive approval for a standards variance.
- VIII-4 The applicant must meet all development standards related to the interim use of recreational vehicle storage to the satisfaction of the City of Long Beach Director of Planning & Building.

VIII-5 The applicant shall construct a significant buffer along the eastern boundary of the site abutting Golden Avenue with a meandering walkway, sitting areas, landscaping and a split face block wall to the satisfaction of the City of Long Beach Director of Planning & Building.

X. NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM

- X-1 Prior to the release of the grading permit, the applicant shall prepare and submit a Storm Drain Master Plan to identify all storm run-off and methods of proposed discharge and shall be approved by all impacted associated agencies. (Also listed under Hydrology).
- X-2 Prior to the release of the grading permit, the applicant shall prepare and submit for approval to both the City of Long Beach and the Regional Water Quality Control Board (RWQCB) a Storm Water Pollution Prevention Plan (SWPPP) that covers all activity during site preparation, grading and construction. The SWPPP shall include all appropriate construction site Best Management Practices (BMPs) as listed on the project plans.
- X-3 Prior to the release of any grading or building permit, the project plans shall include the appropriate construction activities BMPs and erosion and sediment control BMPs as published in the "California Storm Water Best Management Practices Handbook (1993)": CA-10 through CA-12, CA-20, CA-21, CA-23, CA-30 through CA-32, ESC-1 through ESC-56. (Source: Section 18.95.050 of the Long Beach Municipal Code).
- X-4 Prior to the release of any grading or building permit, the project plans shall include a narrative discussion of the rationale used for selecting or rejecting BMPs. The project architect or engineer of record, or authorized qualified designee, shall sign a statement on the plans to the effect: "As the architect/engineer of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activities." (Source: Section 18.95.050 of the Long Beach Municipal Code).
- X-5 Prior to the release of the grading permit, the applicant shall file with the Regional Water Quality Control Board (RWQCB) a Notice of Intent (NOI) to comply with the State construction activity storm water permit. Evidence of such filing shall be submitted to the City. (Source: Section 18.95.050 of the Long Beach Municipal Code).
- **X-6** Prior to the release of the building permit, the applicant shall prepare and submit for approval a Storm Water Pollution Prevention Plan (SWPPP) for post construction activities and ongoing operation of the facility.

XI. NOISE

XI-1 Any person (s) associated with the proposed project shall only operate or permit the operation of any tools or equipment used for remediation, site preparation, construction or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the following hours:

Weekdays 7:00am to 7:00pm Sundays No work permitted Saturdays 9:00am to 6:00pm Holidays No work permitted.

The only exception shall be if the Building Official gives authorization for emergency work at the project site.

- XI-2 Prior to the operation of any piece of equipment during remediation, site preparation or construction on the project site, the applicant shall have taken the necessary steps to limit the impact of on-site noises to the adjacent residential neighborhood. Such steps may include but shall not be limited to, noise attenuation shields, site perimeter sound barrier, etc. The applicant shall be prepared to demonstrate in the field, upon request, All measures which have been taken to mitigate the offending noises.
- XI-3 Prior to the release of building permits, the applicant shall demonstrate compliance with Title 24 for noise attenuation and energy conservation
- XI-4 Prior to the release of the certificate of occupancy, the applicant shall have constructed an eight-foot high permanent sound barrier around the perimeter of the project site.

XIII. PUBLIC SERVICES

- XIII-1 Prior to issuance of a building permit, the project applicant shall submit an emergency access plan to the City of Long Beach Fire Department for review and approval. This plan will identify alternate routes for emergency access during construction activities.
- XIII-2 Sufficient accessibility for fire-fighting equipment shall be provided during all phases of construction and subsequent operation.
- XIII-3 The City of Long Beach Fire Department shall review and approve development plans to ensure compliance with all applicable fire and building codes, adequate access for fire-fighting equipment, and that fire protection facilities are available.

- XIII-4 Prior to issuance of a building permit, the project applicant shall submit an emergency access plan to the City of Long Beach Police Department. This plan will identify alternate routes for emergency access during construction, to areas potentially blocked by project related construction activities.
- XIII-5 Prior to issuance of a building permit, the project applicant shall submit a security and lighting plan to the City of Long Beach Police Department. This plan will identify types and locations of security devices, as well as types and locations of exterior lighting.
- XIII-6 Prior to the issuance of the building permit, project applicant shall submit a plan that incorporates the concepts of CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN TO THE CITY OF LONG BEACH POLICE DEPARTMENT.

XIV. TRANSPORTATION / TRAFFIC

- **XIV-1** See page 153.
- XIV-2 The applicant shall provide an exclusive westbound right-turn lane into the project Site along Wardlow Road. It is recommended that the right-turn pocket have a minimum storage length of 100 feet with a 120 foot transition area.
- XIV-3 The applicant shall modify the existing median and provide an eastbound left-turn lane into the project site along Wardlow Road. It is recommended that the eastbound left-turn pocket have a minimum storage length of 100 feet with a 120-foot transition area.
- XIV-4 The applicant shall install a three-phased traffic signal at the proposed project driveway along Wardlow Road.

References

Long Beach General Plan
Geotechnical Investigation
Traffic Impact Analysis Report
Corrective Action Plan for Basin 1
Phase 1 Environmental Site Assessment
Semi-Annual Groundwater Monitoring

Initial Study and Comments Received

URBEMIS Emission Calculation

SCAQMD CEQA Handbook

Copeley International Corporation,
Botanical Survey and Ecological Habitats of Long Beach